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From: Vivlmore, Tracy  
Sent: Friday, February 10, 2006 2:54 PM  
To: STIC-Biotech/ChemLib  
Subject: Sequence search request, application 10/822,205

Hello,

For application 10/822,205 please perform a standard search of SEQ ID NO: 1 with a maximum length of 30.

Thank you,

Tracy Vivlmore PhD  
Remsen 2B-02, AU 1635  
Mailbox: 2C-18  
Tel: 571-272-2914

10/822,205  
Feb 10 2006  
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Searcher: \_\_\_\_\_  
Searcher Phone: \_\_\_\_\_  
Date Searcher Picked up: \_\_\_\_\_  
Date completed: \_\_\_\_\_  
Searcher Prep Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

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Type of Search  
NA# \_\_\_\_\_ AA# \_\_\_\_\_  
S/L: \_\_\_\_\_ Oligomer: \_\_\_\_\_  
Encode/Transl: \_\_\_\_\_  
Structure #: \_\_\_\_\_ Text: \_\_\_\_\_  
Inventor: \_\_\_\_\_ Litigation: \_\_\_\_\_

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Vendors and cost where applicable  
STN: \_\_\_\_\_  
DIALOG: \_\_\_\_\_  
QUESTEL/ORBIT: \_\_\_\_\_  
LEXIS/NEXIS: \_\_\_\_\_  
SEQUENCE SYSTEM: \_\_\_\_\_  
WWW/Internet: \_\_\_\_\_  
Other (Specify): \_\_\_\_\_

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OM nucleic - nucleic search, using sw model

Run on: February 17, 2006, 19:50:55 ; Search time 138 Seconds  
(without alignments)  
231.856 Million cell updates/sec

Title: US-10-822-205-1

Perfect score: 18

Sequence: 1 tctccacgctgcgcacat 18

Scoring table: IDENTITY\_NUC

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 1026780

Minimum DB seq length: 0  
Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : Issued Patents NA:\*

- 1: /cgn2\_6/prodata/1/ina/1\_COMB.seq:\*
- 2: /cgn2\_6/prodata/1/ina/5\_COMB.seq:\*
- 3: /cgn2\_6/prodata/1/ina/6A\_COMB.seq:\*
- 4: /cgn2\_6/prodata/1/ina/6B\_COMB.seq:\*
- 5: /cgn2\_6/prodata/1/ina/H\_COMB.seq:\*
- 6: /cgn2\_6/prodata/1/ina/PCTUS\_COMB.seq:\*
- 7: /cgn2\_6/prodata/1/ina/PP\_COMB.seq:\*
- 8: /cgn2\_6/prodata/1/ina/RE\_COMB.seq:\*
- 9: /cgn2\_6/prodata/1/ina/Backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	18	100.0	18	2	US-08-217-082A-17
2	18	100.0	18	2	US-08-465-485A-17
3	18	100.0	18	2	US-08-465-485A-24
4	18	100.0	18	3	US-09-080-285-17
5	18	100.0	18	3	US-09-080-285-24
6	18	100.0	18	3	US-09-249-730-218
7	18	100.0	18	3	US-09-118-220-1
8	18	100.0	18	3	US-08-738-652-55
9	18	100.0	18	3	US-09-030-701-27
10	18	100.0	18	3	US-09-286-098-59
11	18	100.0	18	3	US-09-286-098-104
12	18	100.0	18	3	US-08-960-774-45
13	18	100.0	18	3	US-09-078-954-14
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17	18	100.0	18	3	US-09-191-170-53
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19	18	100.0	18	3	US-09-690-921-2
20	18	100.0	18	3	US-09-301-829A-2
21	18	100.0	18	3	US-09-249-247-218
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24	18	100.0	18	3	US-09-634-320-7

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27	18	100.0	18	3	US-09-724-425-24	Sequence 24, Appl
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29	18	100.0	18	3	US-10-002-884A-6	Sequence 6, Appl1
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33	18	100.0	18	3	US-09-672-126B-110	Sequence 110, App
34	18	100.0	18	3	US-09-634-320-8	Sequence 8, Appl1
35	18	100.0	18	3	US-09-634-320-9	Sequence 9, Appl1
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47	16.4	91.1	16.4	18	US-09-030-701-60	Sequence 60, Appl
48	16.4	91.1	16.4	18	US-09-086-098-72	Sequence 72, Appl
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50	16.4	91.1	16.4	18	US-09-191-170-66	Sequence 66, Appl
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52	16.4	91.1	16.4	18	US-09-954-987B-113	Sequence 113, App
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55	15	83.3	15	2	US-09-632-748-7	Sequence 7, Appl1
56	15	83.3	15	3	US-10-080-794-13	Sequence 13, Appl
57	14.8	82.2	14.8	18	US-08-217-082A-10	Sequence 10, Appl
58	14	77.8	14	17	US-09-030-701-40	Sequence 40, Appl
59	13.4	74.4	13.4	17	US-09-286-098-71	Sequence 71, Appl
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61	13.4	74.4	13.4	17	US-09-325-193A-61	Sequence 61, Appl
62	13.4	74.4	13.4	17	US-09-191-170-65	Sequence 65, Appl
63	13.4	74.4	13.4	17	US-09-337-619-71	Sequence 71, Appl
64	13.4	74.4	13.4	17	US-09-954-987B-114	Sequence 114, App
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78	13	72.2	13	25	US-09-396-196G-110143	Sequence 110143, A
79	12.8	71.1	12.8	25	US-09-396-196G-100144	Sequence 100144, A
80	12.8	71.1	12.8	25	US-09-396-196G-100145	Sequence 100145, A
81	12.8	71.1	12.8	25	US-09-396-196G-100146	Sequence 100146, A
82	12.2	67.8	12.2	25	US-09-396-196G-100147	Sequence 100147, A
83	12.2	67.8	12.2	25	US-09-396-196G-100148	Sequence 100148, A
84	12.2	67.8	12.2	25	US-09-396-196G-100149	Sequence 100149, A
85	12.2	67.8	12.2	25	US-09-396-196G-100150	Sequence 100150, A
86	12.2	67.8	12.2	25	US-09-396-196G-100151	Sequence 100151, A
87	12.2	67.8	12.2	25	US-09-396-196G-100152	Sequence 100152, A
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89	12.2	67.8	12.2	25	US-09-396-196G-100154	Sequence 100154, A
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92	11.8	65.6	11.8	25	US-09-396-196G-53321	Sequence 53321, A
93	11.8	65.6	11.8	25	US-09-396-196G-118641	Sequence 118641, A
94	11.8	65.6	11.8	26	US-09-936-588-10	Sequence 10, Appl
95	11.8	65.6	11.8	27	US-09-289-180-12	Sequence 12, Appl
96	11.8	65.6	11.8	27	US-09-302-357-16	Sequence 16, Appl
97	11.8	65.6	11.8	27	US-09-978-709-12	Sequence 12, Appl

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C 106	11.6	64.4	28	3	US-09-325-928-476	
C 107	11.6	64.4	28	3	US-09-325-201B-476	
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C 115	11.4	63.3	25	3	US-09-396-196G-67863	
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117	11.2	62.2	21	3	US-10-101-957B-20	
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119	11.2	62.2	25	3	US-09-396-196G-15951	
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123	11.2	62.2	25	3	US-09-396-196G-64277	
C 124	11.2	62.2	25	3	US-09-396-196G-65659	
C 125	11.2	62.2	25	3	US-09-396-196G-65660	
C 126	11.2	62.2	25	3	US-09-396-196G-65661	
C 127	11.2	62.2	25	3	US-09-396-196G-70835	
128	11.2	62.2	25	3	US-09-396-196G-76001	
129	11.2	62.2	25	3	US-09-396-196G-100148	
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C 131	11.2	62.2	30	3	US-09-998-716-2	
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133	11.1	61.1	12	3	US-09-286-098-69	
134	11.1	61.1	12	3	US-08-960-774-69	
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142	11.1	61.1	17	2	US-08-317-082A-11	
C 143	11.1	61.1	17	3	US-09-818-875-2870	
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C 147	11.1	61.1	25	3	US-09-402-181B-425	
C 148	11.1	61.1	25	3	US-09-721-456-425	
C 149	11.1	61.1	25	3	US-09-396-196G-26162	
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151	11.1	61.1	27	3	US-09-726-345-15	
C 152	11.1	61.1	28	2	US-08-840-344-7	
153	11.1	61.1	28	2	US-08-840-344-13	
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C 155	11.1	61.1	30	3	US-09-953-052-12	
C 156	10.8	60.0	15	3	US-09-180-437-145	
C 157	10.8	60.0	18	3	US-09-226-402C-20	
158	10.8	60.0	18	3	US-08-852-666-42	
159	10.8	60.0	19	3	US-09-226-402C-19	
160	10.8	60.0	19	3	US-08-852-666-41	
161	10.8	60.0	19	3	US-08-852-666-41	
C 162	10.8	60.0	20	3	US-09-418-640-84	
C 163	10.8	60.0	20	3	US-09-851-896-76	
C 164	10.8	60.0	20	3	US-09-792-594-60	
C 165	10.8	60.0	20	3	US-09-226-402C-18	
166	10.8	60.0	20	3	US-08-852-666-40	
167	10.8	60.0	20	3	US-10-024-396-68	
168	10.8	60.0	21	3	US-09-375-318-67	
169	10.8	60.0	21	3	US-09-226-402C-17	
170	10.8	60.0	21	3	US-08-852-666-39	

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Sequence 44, Appl	C 173	10.8	60.0	25	2	US-08-211-430-6
Sequence 46, Appl	C 174	10.8	60.0	25	3	US-08-617-874-1
Sequence 6, Appl1	C 175	10.8	60.0	25	3	US-09-007-678B-30
Sequence 109443,	C 176	10.8	60.0	25	3	US-09-733-042-28
Sequence 476, App	C 177	10.8	60.0	25	3	US-09-396-196G-174
Sequence 476, App	C 178	10.8	60.0	25	3	US-09-396-196G-5726
Sequence 595, App	C 179	10.8	60.0	25	3	US-09-396-196G-10159
Sequence 219, App	C 180	10.8	60.0	25	3	US-09-396-196G-15952
Sequence 11, Appl	C 181	10.8	60.0	25	3	US-09-396-196G-18240
Sequence 67861, A	C 182	10.8	60.0	25	3	US-09-396-196G-59517
Sequence 67862, A	C 183	10.8	60.0	25	3	US-09-396-196G-59518
Sequence 67863, A	C 184	10.8	60.0	25	3	US-09-396-196G-80431
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Sequence 15951, A	C 186	10.8	60.0	25	3	US-09-396-196G-109445
Sequence 25689, A	C 187	10.8	60.0	25	3	US-09-396-196G-109446
Sequence 51848, A	C 188	10.8	60.0	25	3	US-09-396-196G-117063
Sequence 51865, A	C 189	10.8	60.0	25	3	US-09-396-196G-117064
Sequence 64277, A	C 190	10.8	60.0	25	3	US-09-396-196G-117065
Sequence 65659, A	C 191	10.8	60.0	25	3	US-09-396-196G-120005
Sequence 65660, A	C 192	10.8	60.0	25	3	US-09-396-196G-109445
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Sequence 65662, A	C 194	10.8	60.0	25	3	US-09-396-196G-117064
Sequence 70835, A	C 195	10.8	60.0	25	3	US-09-396-196G-117065
Sequence 76001, A	C 196	10.8	60.0	25	3	US-09-396-196G-117065
Sequence 100148,	C 197	10.8	60.0	25	3	US-09-396-196G-120005
Sequence 107962,	C 198	10.8	60.0	25	3	US-09-493-357A-1
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Sequence 38, Appl	C 200	10.8	60.0	26	3	US-09-108-010B-20
Sequence 69, Appl	C 201	10.8	60.0	26	3	US-09-494-332A-8
Sequence 59, Appl	C 202	10.8	60.0	26	3	US-09-758-652-20
Sequence 59, Appl	C 203	10.8	60.0	26	3	US-09-684-651-20
Sequence 59, Appl	C 204	10.8	60.0	27	3	US-09-238-303-1
Sequence 59, Appl	C 205	10.8	60.0	27	3	US-09-946-239-1
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Sequence 69, Appl	C 207	10.8	60.0	29	2	US-08-032-846-25
Sequence 59, Appl	C 208	10.8	60.0	29	3	US-08-474-633-25
Sequence 59, Appl	C 209	10.6	58.9	18	3	US-09-923-327A-260
Sequence 59, Appl	C 210	10.6	58.9	20	3	US-09-228-302-24
Sequence 59, Appl	C 211	10.6	58.9	21	2	US-08-009-263C-60
Sequence 73, Appl	C 212	10.6	58.9	21	3	US-08-838-712B-60
Sequence 74, Appl	C 213	10.6	58.9	24	3	PCT-US94-07091-5
Sequence 5, Appl1	C 214	10.6	58.9	24	3	US-09-463-380-5
Sequence 11, Appl	C 215	10.6	58.9	24	3	US-09-985-357A-5
Sequence 2870, Ap	C 216	10.6	58.9	25	3	US-09-396-196G-5861
Sequence 2871, Ap	C 217	10.6	58.9	25	3	US-09-396-196G-9541
Sequence 425, App	C 218	10.6	58.9	25	3	US-09-396-196G-9542
Sequence 192, App	C 219	10.6	58.9	25	3	US-09-396-196G-13874
Sequence 425, App	C 220	10.6	58.9	25	3	US-09-396-196G-16741
Sequence 425, App	C 221	10.6	58.9	25	3	US-09-396-196G-22620
Sequence 425, App	C 222	10.6	58.9	25	3	US-09-396-196G-29901
Sequence 26162, A	C 223	10.6	58.9	25	3	US-09-396-196G-31583
Sequence 78645, A	C 224	10.6	58.9	25	3	US-09-396-196G-34409
Sequence 7, Appl	C 225	10.6	58.9	25	3	US-09-396-196G-35077
Sequence 15, Appl	C 226	10.6	58.9	25	3	US-09-396-196G-35078
Sequence 13, Appl	C 227	10.6	58.9	25	3	US-09-396-196G-52367
Sequence 12, Appl	C 228	10.6	58.9	25	3	US-09-396-196G-52368
Sequence 12, Appl	C 229	10.6	58.9	25	3	US-09-396-196G-62353
Sequence 145, App	C 230	10.6	58.9	25	3	US-09-396-196G-68030
Sequence 20, Appl	C 231	10.6	58.9	25	3	US-09-396-196G-76769
Sequence 42, Appl	C 232	10.6	58.9	25	3	US-09-396-196G-79034
Sequence 42, Appl	C 233	10.6	58.9	25	3	US-09-396-196G-79035
Sequence 41, Appl	C 234	10.6	58.9	25	3	US-09-396-196G-87467
Sequence 84, Appl	C 235	10.6	58.9	25	3	US-09-396-196G-87468
Sequence 76, Appl	C 236	10.6	58.9	25	3	US-09-396-196G-90609
Sequence 60, Appl	C 237	10.6	58.9	25	3	US-09-396-196G-103529
Sequence 18, Appl	C 238	10.6	58.9	25	3	US-09-396-196G-103530
Sequence 40, Appl	C 239	10.6	58.9	25	3	US-09-396-196G-109618
Sequence 68, Appl	C 240	10.6	58.9	25	3	US-09-396-196G-109619
Sequence 17, Appl	C 241	10.6	58.9	25	3	US-09-396-196G-116066
Sequence 39, Appl	C 242	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 39, Appl	C 243	10.6	58.9	25	3	US-09-396-196G-127483

Sequence 32, Appl	C 244	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 30, Appl1	C 245	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 1, Appl1	C 246	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 30, Appl	C 247	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 174, App	C 248	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 5726, Ap	C 249	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 10159, A	C 250	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 15952, A	C 251	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 18240, A	C 252	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 26931, A	C 253	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 26932, A	C 254	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 38236, A	C 255	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 38642, A	C 256	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 53625, A	C 257	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 53865, A	C 258	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 59517, A	C 259	10.6	58.9	25	3	US-09-396-196G-127483
Sequence 59518, A	C 260	10.6	58.9	25	3	US-09-396-196G-127483</



C 244	10.6	58.9	26	3	US-08-294-312B-50	Sequence 50, Appl	C 317	10.2	56.7	18	3	US-10-446-468-7	Sequence 7, Appl1
C 245	10.6	58.9	26	3	US-08-468-024B-50	Sequence 50, Appl	C 318	10.2	56.7	18	6	PCT-US96-08743A-4	Sequence 4, Appl1
C 246	10.6	58.9	26	3	US-08-465-679-50	Sequence 50, Appl	C 319	10.2	56.7	19	3	US-09-155-885A-48	Sequence 48, Appl
C 247	10.6	58.9	27	3	US-09-749-601A-7	Sequence 7, Appl1	C 320	10.2	56.7	20	3	US-08-777-266A-44	Sequence 44, Appl
C 248	10.6	58.9	28	2	US-08-487-753-10	Sequence 10, Appl	C 321	10.2	56.7	20	3	US-09-444-053-68	Sequence 44, Appl
C 249	10.6	58.9	28	2	US-08-480-065-10	Sequence 10, Appl	C 322	10.2	56.7	20	3	US-09-326-186B-44	Sequence 44, Appl
C 250	10.6	58.9	28	3	US-08-487-744-10	Sequence 10, Appl	C 323	10.2	56.7	20	3	US-09-496-694B-180	Sequence 180, Appl
C 251	10.6	58.9	28	6	PCT-US93-09167-10	Sequence 10, Appl	C 324	10.2	56.7	20	3	US-09-780-049-81	Sequence 81, Appl
C 252	10.6	58.9	29	3	US-09-407-956-6	Sequence 6, Appl1	C 325	10.2	56.7	20	3	US-09-744-022-4	Sequence 4, Appl1
C 253	10.6	58.9	29	3	US-09-880-484B-13	Sequence 13, Appl	C 326	10.2	56.7	20	3	US-09-769-482-9	Sequence 9, Appl1
C 254	10.6	58.9	29	3	US-10-438-648-13	Sequence 13, Appl	C 327	10.2	56.7	20	3	US-09-700-847-9	Sequence 9, Appl1
C 255	10.6	58.9	30	2	US-08-488-376-10	Sequence 10, Appl	C 328	10.2	56.7	20	3	US-09-131-827A-5	Sequence 5, Appl1
C 256	10.6	58.9	30	2	US-08-634-223-10	Sequence 10, Appl	C 329	10.2	56.7	20	3	US-09-131-827A-12	Sequence 12, Appl
C 257	10.6	58.9	30	2	US-08-634-224-10	Sequence 10, Appl	C 330	10.2	56.7	20	3	US-09-780-045-41	Sequence 41, Appl
C 258	10.6	58.9	30	2	US-08-634-400-10	Sequence 10, Appl	C 331	10.2	56.7	20	3	US-09-624-052-16	Sequence 16, Appl
C 259	10.6	58.9	30	2	US-08-635-878-10	Sequence 10, Appl	C 332	10.2	56.7	20	3	US-09-820-052-16B	Sequence 16B, App
C 260	10.6	58.9	30	3	US-08-770-057-10	Sequence 10, Appl	C 333	10.2	56.7	20	3	US-09-918-186A-180	Sequence 180, App
C 261	10.6	58.9	30	3	US-09-335-697B-10	Sequence 10, Appl	C 334	10.2	56.7	20	3	US-09-672-126B-155	Sequence 155, App
C 262	10.6	58.9	30	3	US-09-335-697B-10	Sequence 10, Appl	C 335	10.2	56.7	21	2	US-07-882-838E-40	Sequence 40, Appl
C 263	10.6	58.9	30	3	US-09-788-657-1	Sequence 1, Appl1	C 336	10.2	56.7	21	3	US-08-933-983-36	Sequence 36, Appl
C 264	10.6	58.9	30	3	US-09-084-425-23	Sequence 23, Appl	C 337	10.2	56.7	21	3	US-09-032-894-114	Sequence 114, App
C 265	10.6	58.9	30	3	US-10-641-068-1	Sequence 1, Appl1	C 338	10.2	56.7	21	3	US-09-032-894-116	Sequence 116, App
C 266	10.4	57.8	17	3	US-09-896-096A-15	Sequence 15, Appl	C 339	10.2	56.7	21	3	US-09-031-626-114	Sequence 114, App
C 267	10.4	57.8	20	2	US-07-952-442-5	Sequence 5, Appl1	C 340	10.2	56.7	21	3	US-09-031-626-116	Sequence 116, App
C 268	10.4	57.8	20	2	US-08-222-177A-55	Sequence 5, Appl	C 341	10.2	56.7	22	2	US-08-256-426B-266	Sequence 266, App
C 269	10.4	57.8	20	2	US-08-269-766-5	Sequence 5, Appl1	C 342	10.2	56.7	23	3	US-09-195-666A-44	Sequence 44, Appl
C 270	10.4	57.8	20	2	US-08-550-715-12	Sequence 12, Appl	C 343	10.2	56.7	23	3	US-08-485-355B-26	Sequence 26, Appl
C 271	10.4	57.8	20	2	US-08-319-545A-5	Sequence 5, Appl1	C 344	10.2	56.7	23	3	US-09-635-705-44	Sequence 44, Appl
C 272	10.4	57.8	20	2	US-09-092-988-5	Sequence 5, Appl1	C 345	10.2	56.7	23	3	US-09-634-858A-44	Sequence 44, Appl
C 273	10.4	57.8	20	2	US-09-106-216-5	Sequence 5, Appl1	C 346	10.2	56.7	23	3	US-08-869-927C-44	Sequence 44, Appl
C 274	10.4	57.8	20	3	US-09-106-216-33	Sequence 33, Appl	C 347	10.2	56.7	24	3	US-08-850-613A-11	Sequence 11, Appl
C 275	10.4	57.8	20	3	US-09-283-040-4	Sequence 4, Appl1	C 348	10.2	56.7	24	3	US-09-398-539A-11	Sequence 11, Appl
C 276	10.4	57.8	20	3	US-09-429-034-5	Sequence 5, Appl1	C 349	10.2	56.7	24	3	US-09-026-033-6	Sequence 6, Appl1
C 277	10.4	57.8	20	3	US-09-433-694-17	Sequence 17, Appl	C 350	10.2	56.7	25	3	US-09-459-138-1	Sequence 1, Appl1
C 278	10.4	57.8	20	3	US-09-430-652-95	Sequence 95, Appl	C 351	10.2	56.7	25	3	US-09-396-196G-1014	Sequence 1014, App
C 279	10.4	57.8	21	2	US-09-935-338-100	Sequence 100, App	C 352	10.2	56.7	25	3	US-09-396-196G-3627	Sequence 3627, App
C 280	10.4	57.8	21	2	US-08-609-443B-20	Sequence 20, Appl	C 353	10.2	56.7	25	3	US-09-396-196G-4204	Sequence 4204, App
C 281	10.4	57.8	21	3	US-08-851-896-20	Sequence 20, Appl	C 354	10.2	56.7	25	3	US-09-396-196G-4205	Sequence 4205, App
C 282	10.4	57.8	23	2	US-08-859-998-87	Sequence 87, Appl	C 355	10.2	56.7	25	3	US-09-396-196G-9489	Sequence 9489, App
C 283	10.4	57.8	23	3	US-09-225-928-87	Sequence 87, Appl	C 356	10.2	56.7	25	3	US-09-396-196G-9489	Sequence 9489, App
C 284	10.4	57.8	23	3	US-09-425-201B-87	Sequence 87, Appl1	C 357	10.2	56.7	25	3	US-09-396-196G-16826	Sequence 16826, A
C 285	10.4	57.8	23	3	US-09-490-700-8	Sequence 87, Appl1	C 358	10.2	56.7	25	3	US-09-396-196G-16837	Sequence 16837, A
C 286	10.4	57.8	25	3	US-09-014-065-11	Sequence 11, Appl	C 359	10.2	56.7	25	3	US-09-396-196G-16839	Sequence 16839, A
C 287	10.4	57.8	25	3	US-09-761-782-7	Sequence 7, Appl1	C 360	10.2	56.7	25	3	US-09-396-196G-16840	Sequence 16840, A
C 288	10.4	57.8	25	3	US-09-396-196G-15668	Sequence 15668, A	C 361	10.2	56.7	25	3	US-09-396-196G-19736	Sequence 19736, A
C 289	10.4	57.8	25	3	US-09-396-196G-15669	Sequence 15669, A	C 362	10.2	56.7	25	3	US-09-396-196G-21035	Sequence 21035, A
C 290	10.4	57.8	25	3	US-09-396-196G-27723	Sequence 27723, A	C 363	10.2	56.7	25	3	US-09-396-196G-23817	Sequence 23817, A
C 291	10.4	57.8	25	3	US-09-396-196G-27724	Sequence 27724, A	C 364	10.2	56.7	25	3	US-09-396-196G-23818	Sequence 23818, A
C 292	10.4	57.8	25	3	US-09-396-196G-28519	Sequence 28519, A	C 365	10.2	56.7	25	3	US-09-396-196G-30988	Sequence 30988, A
C 293	10.4	57.8	25	3	US-09-396-196G-60422	Sequence 60422, A	C 366	10.2	56.7	25	3	US-09-396-196G-30989	Sequence 30989, A
C 294	10.4	57.8	25	3	US-09-396-196G-80432	Sequence 80432, A	C 367	10.2	56.7	25	3	US-09-396-196G-34719	Sequence 34719, A
C 295	10.4	57.8	25	3	US-09-396-196G-118409	Sequence 118409, A	C 368	10.2	56.7	25	3	US-09-396-196G-34720	Sequence 34720, A
C 296	10.4	57.8	25	3	US-09-396-196G-127004	Sequence 127004, A	C 369	10.2	56.7	25	3	US-09-396-196G-35089	Sequence 35089, A
C 297	10.2	56.7	15	2	US-08-585-684B-202	Sequence 202, App	C 370	10.2	56.7	25	3	US-09-396-196G-38565	Sequence 38565, A
C 298	10.2	56.7	15	3	US-09-038-073-202	Sequence 202, App	C 371	10.2	56.7	25	3	US-09-396-196G-38567	Sequence 38567, A
C 299	10.2	56.7	17	3	US-09-187-946-16	Sequence 16, Appl	C 372	10.2	56.7	25	3	US-09-396-196G-42597	Sequence 42597, A
C 300	10.2	56.7	17	3	US-09-818-875-223	Sequence 223, App	C 373	10.2	56.7	25	3	US-09-396-196G-42598	Sequence 42598, A
C 301	10.2	56.7	17	3	US-09-818-875-224	Sequence 224, App	C 374	10.2	56.7	25	3	US-09-396-196G-42599	Sequence 42599, A
C 302	10.2	56.7	18	2	US-08-323-910-5	Sequence 5, Appl1	C 375	10.2	56.7	25	3	US-09-396-196G-53833	Sequence 53833, A
C 303	10.2	56.7	18	2	US-08-967-101-178	Sequence 178, App	C 376	10.2	56.7	25	3	US-09-396-196G-53832	Sequence 53832, A
C 304	10.2	56.7	18	2	US-08-488-811-4	Sequence 4, Appl1	C 377	10.2	56.7	25	3	US-09-396-196G-53831	Sequence 53831, A
C 305	10.2	56.7	18	2	US-08-592-541-178	Sequence 178, App	C 378	10.2	56.7	25	3	US-09-396-196G-53830	Sequence 53830, A
C 306	10.2	56.7	18	3	US-09-124-698-178	Sequence 178, App	C 379	10.2	56.7	25	3	US-09-396-196G-43331	Sequence 43331, A
C 307	10.2	56.7	18	3	US-09-127-480-178	Sequence 178, App	C 380	10.2	56.7	25	3	US-09-396-196G-43332	Sequence 43332, A
C 308	10.2	56.7	18	3	US-09-116-032-22	Sequence 22, Appl	C 381	10.2	56.7	25	3	US-09-396-196G-43333	Sequence 43333, A
C 309	10.2	56.7	18	3	US-09-578-324-3	Sequence 3, Appl1	C 382	10.2	56.7	25	3	US-09-396-196G-59484	Sequence 59484, A
C 310	10.2	56.7	18	3	US-09-124-573-178	Sequence 178, App	C 383	10.2	56.7	25	3	US-09-396-196G-59485	Sequence 59485, A
C 311	10.2	56.7	18	3	US-09-485-077A-4	Sequence 4, Appl1	C 384	10.2	56.7	25	3	US-09-396-196G-61005	Sequence 61005, A
C 312	10.2	56.7	18	3	US-09-636-796A-178	Sequence 178, App	C 385	10.2	56.7	25	3	US-09-396-196G-61006	Sequence 61006, A
C 313	10.2	56.7	18	3	US-09-422-978-5011	Sequence 5011, App	C 386	10.2	56.7	25	3	US-09-396-196G-66616	Sequence 66616, A
C 314	10.2	56.7	18	3	US-09-747-391-64	Sequence 64, Appl	C 387	10.2	56.7	25	3	US-09-396-196G-66616	Sequence 66616, A
C 315	10.2	56.7	18	3	US-10-099-542-2	Sequence 2, Appl1	C 388	10.2	56.7	25	3	US-09-396-196G-74838	Sequence 74838, A
C 316	10.2	56.7	18	3	US-10-393-905-6	Sequence 6, Appl1	C 389	10.2	56.7	25	3	US-09-396-196G-74835	Sequence 74835, A



536	10	55.6	30	2	US-08-361-337-21	Sequence 21, App1	C 609	9.8	54.4	20	2	US-08-034-650-7	Sequence 7, App1
C 537	10	55.6	30	2	US-08-394-600B-18	Sequence 18, App1	C 610	9.8	54.4	20	2	US-08-343-818-13	Sequence 13, App1
C 538	10	55.6	30	2	US-08-805-918-24	Sequence 2, App1	C 611	9.8	54.4	20	2	US-08-449-015-7	Sequence 7, App1
C 539	10	55.6	30	2	US-08-809-185-3	Sequence 3, App1	C 612	9.8	54.4	20	3	US-08-757-024-833	Sequence 833, App
C 540	10	55.6	30	2	US-08-053-451B-131	Sequence 131, App	C 613	9.8	54.4	20	3	US-08-757-024-844	Sequence 844, App
C 541	10	55.6	30	2	US-08-230-428B-6	Sequence 6, App1	C 614	9.8	54.4	20	3	US-08-757-024-941	Sequence 941, App
C 542	10	55.6	30	3	US-09-052-919-13	Sequence 13, App1	C 615	9.8	54.4	20	3	US-09-489-869-66	Sequence 66, App1
C 543	10	55.6	30	3	US-08-395-456C-18	Sequence 18, App1	C 616	9.8	54.4	20	3	US-09-318-191-19	Sequence 19, App1
C 544	10	55.6	30	3	US-08-487-453A-18	Sequence 18, App1	C 617	9.8	54.4	20	3	US-09-851-896-18	Sequence 18, App1
C 545	10	55.6	30	3	US-09-953-052-13	Sequence 13, App1	C 618	9.8	54.4	20	3	US-09-601-144-29	Sequence 29, App1
C 546	10	55.6	30	6	PCT-US95-02513-18	Sequence 18, App1	C 619	9.8	54.4	20	3	US-09-112-580-59	Sequence 59, App1
C 547	9.8	54.4	13	3	US-08-757-024-896	Sequence 896, App	C 620	9.8	54.4	20	3	US-09-673-429-5	Sequence 5, App1
C 548	9.8	54.4	13	3	US-09-093-972C-896	Sequence 8, App1	C 621	9.8	54.4	20	3	US-09-093-972C-833	Sequence 833, App
C 549	9.8	54.4	14	2	US-08-034-650-8	Sequence 8, App1	C 622	9.8	54.4	20	3	US-09-093-972C-941	Sequence 941, App
C 550	9.8	54.4	14	3	US-08-757-024-890	Sequence 890, App	C 623	9.8	54.4	20	3	US-09-843-377-17	Sequence 17, App1
C 551	9.8	54.4	14	3	US-08-757-024-895	Sequence 895, App	C 624	9.8	54.4	20	3	US-10-439-479-10	Sequence 10, App1
C 552	9.8	54.4	14	3	US-08-757-024-947	Sequence 947, App	C 625	9.8	54.4	20	3	US-08-804-439A-56	Sequence 56, App1
C 553	9.8	54.4	14	3	US-09-093-972C-890	Sequence 890, App	C 626	9.8	54.4	21	3	US-08-804-439A-58	Sequence 58, App1
C 554	9.8	54.4	14	3	US-09-093-972C-895	Sequence 895, App	C 627	9.8	54.4	21	3	US-08-720-229-56	Sequence 56, App1
C 555	9.8	54.4	14	3	US-09-093-972C-889	Sequence 889, App	C 628	9.8	54.4	21	3	US-08-720-229-58	Sequence 58, App1
C 556	9.8	54.4	14	3	US-09-093-972C-947	Sequence 947, App	C 629	9.8	54.4	21	3	US-08-757-024-820	Sequence 820, App
C 557	9.8	54.4	15	3	US-08-757-024-883	Sequence 883, App	C 630	9.8	54.4	21	3	US-08-757-024-832	Sequence 832, App
C 558	9.8	54.4	15	3	US-08-757-024-889	Sequence 889, App	C 631	9.8	54.4	21	3	US-08-757-024-940	Sequence 940, App
C 559	9.8	54.4	15	3	US-08-757-024-946	Sequence 946, App	C 632	9.8	54.4	21	3	US-09-984-116A-10	Sequence 10, App1
C 560	9.8	54.4	15	3	US-08-147-592A-26	Sequence 26, App1	C 633	9.8	54.4	21	3	US-09-093-972C-832	Sequence 832, App
C 561	9.8	54.4	15	3	US-09-180-437-128	Sequence 128, App	C 634	9.8	54.4	21	3	US-09-093-972C-820	Sequence 820, App
C 562	9.8	54.4	15	3	US-08-292-694A-26	Sequence 26, App1	C 635	9.8	54.4	21	3	US-09-093-972C-940	Sequence 940, App
C 563	9.8	54.4	15	3	US-09-093-972C-883	Sequence 883, App	C 636	9.8	54.4	21	3	US-09-093-972C-832	Sequence 832, App
C 564	9.8	54.4	15	3	US-09-093-972C-889	Sequence 889, App	C 637	9.8	54.4	22	2	US-08-531-427A-2	Sequence 2, App1
C 565	9.8	54.4	15	3	US-09-093-972C-946	Sequence 946, App	C 638	9.8	54.4	22	3	US-08-757-024-806	Sequence 806, App
C 566	9.8	54.4	16	3	US-08-757-024-875	Sequence 875, App	C 639	9.8	54.4	22	3	US-08-757-024-819	Sequence 819, App
C 567	9.8	54.4	16	3	US-08-757-024-882	Sequence 882, App	C 640	9.8	54.4	22	3	US-08-757-024-939	Sequence 939, App
C 568	9.8	54.4	16	3	US-08-757-024-945	Sequence 945, App	C 641	9.8	54.4	22	3	US-09-814-915A-1	Sequence 1, App1
C 569	9.8	54.4	16	3	US-09-093-972C-875	Sequence 875, App	C 642	9.8	54.4	22	3	US-09-093-972C-806	Sequence 806, App
C 570	9.8	54.4	16	3	US-09-093-972C-882	Sequence 882, App	C 643	9.8	54.4	22	3	US-09-093-972C-819	Sequence 819, App
C 571	9.8	54.4	16	3	US-09-093-972C-945	Sequence 945, App	C 644	9.8	54.4	22	3	US-09-093-972C-939	Sequence 939, App
C 572	9.8	54.4	17	2	US-08-379-081B-285	Sequence 285, App	C 645	9.8	54.4	22	3	US-10-088-092A-31	Sequence 31, App1
C 573	9.8	54.4	17	2	US-08-379-078-286	Sequence 285, App	C 646	9.8	54.4	22	3	US-10-439-479-11	Sequence 11, App1
C 574	9.8	54.4	17	3	US-08-757-024-866	Sequence 866, App	C 647	9.8	54.4	23	3	US-08-757-024-791	Sequence 791, App
C 575	9.8	54.4	17	3	US-08-757-024-874	Sequence 874, App	C 648	9.8	54.4	23	3	US-08-757-024-805	Sequence 805, App
C 576	9.8	54.4	17	3	US-08-757-024-944	Sequence 944, App	C 649	9.8	54.4	23	3	US-08-757-024-938	Sequence 938, App
C 577	9.8	54.4	17	3	US-09-866-108A-9665	Sequence 965, App	C 650	9.8	54.4	23	3	US-09-093-972C-791	Sequence 791, App
C 578	9.8	54.4	17	3	US-09-866-108A-9666	Sequence 966, App	C 651	9.8	54.4	23	3	US-09-093-972C-805	Sequence 805, App
C 579	9.8	54.4	17	3	US-09-866-108A-9667	Sequence 9667, App	C 652	9.8	54.4	23	3	US-09-093-972C-938	Sequence 938, App
C 580	9.8	54.4	17	3	US-09-866-108A-9668	Sequence 9668, App	C 653	9.8	54.4	24	2	US-08-664-872-7	Sequence 7, App1
C 581	9.8	54.4	17	3	US-09-866-108A-9669	Sequence 9669, App	C 654	9.8	54.4	24	3	US-08-826-390-12	Sequence 12, App1
C 582	9.8	54.4	17	3	US-09-226-402C-21	Sequence 21, App1	C 655	9.8	54.4	24	3	US-08-757-024-775	Sequence 775, App
C 583	9.8	54.4	17	3	US-08-852-666-43	Sequence 43, App1	C 656	9.8	54.4	24	3	US-08-757-024-790	Sequence 790, App
C 584	9.8	54.4	17	3	US-09-093-972C-866	Sequence 866, App	C 657	9.8	54.4	24	3	US-08-757-024-937	Sequence 937, App
C 585	9.8	54.4	17	3	US-09-093-972C-874	Sequence 874, App	C 658	9.8	54.4	24	3	US-09-005-165-8	Sequence 8, App1
C 586	9.8	54.4	17	3	US-09-093-972C-944	Sequence 944, App	C 659	9.8	54.4	24	3	US-09-019-973-7	Sequence 7, App1
C 587	9.8	54.4	18	3	US-08-757-024-856	Sequence 856, App	C 660	9.8	54.4	24	3	US-09-260-897-7	Sequence 7, App1
C 588	9.8	54.4	18	3	US-08-757-024-865	Sequence 865, App	C 661	9.8	54.4	24	3	US-09-093-972C-775	Sequence 775, App
C 589	9.8	54.4	18	3	US-08-757-024-943	Sequence 943, App	C 662	9.8	54.4	24	3	US-09-093-972C-790	Sequence 790, App
C 590	9.8	54.4	18	3	US-09-205-143-75	Sequence 75, App1	C 663	9.8	54.4	24	3	US-09-093-972C-937	Sequence 937, App
C 591	9.8	54.4	18	3	US-09-205-143-76	Sequence 76, App1	C 664	9.8	54.4	25	3	US-08-757-024-758	Sequence 758, App
C 592	9.8	54.4	18	3	US-09-193-377B-54	Sequence 54, App1	C 665	9.8	54.4	25	3	US-08-757-024-774	Sequence 774, App
C 593	9.8	54.4	18	3	US-09-193-377B-58	Sequence 58, App1	C 666	9.8	54.4	25	3	US-08-757-024-936	Sequence 936, App
C 594	9.8	54.4	18	3	US-09-422-978-5232	Sequence 5232, App	C 667	9.8	54.4	25	3	US-09-025-151-2	Sequence 2, App1
C 595	9.8	54.4	18	3	US-09-093-972C-865	Sequence 865, App	C 668	9.8	54.4	25	3	US-09-637-240-2	Sequence 2, App1
C 596	9.8	54.4	18	3	US-09-093-972C-866	Sequence 866, App	C 669	9.8	54.4	25	3	US-09-866-108A-14557	Sequence 14557, App
C 597	9.8	54.4	18	3	US-09-093-972C-943	Sequence 943, App	C 670	9.8	54.4	25	3	US-09-866-108A-14558	Sequence 14558, App
C 598	9.8	54.4	19	2	US-08-512-681-11	Sequence 11, App1	C 671	9.8	54.4	25	3	US-09-866-108A-14559	Sequence 14559, App
C 599	9.8	54.4	19	3	US-08-757-024-845	Sequence 845, App	C 672	9.8	54.4	25	3	US-09-866-108A-14560	Sequence 14560, App
C 600	9.8	54.4	19	3	US-08-757-024-855	Sequence 855, App	C 673	9.8	54.4	25	3	US-09-866-108A-14561	Sequence 14561, App
C 601	9.8	54.4	19	3	US-08-757-024-942	Sequence 942, App	C 674	9.8	54.4	25	3	US-09-866-108A-14562	Sequence 14562, App
C 602	9.8	54.4	19	3	US-09-593-012-109	Sequence 109, App	C 675	9.8	54.4	25	3	US-09-866-108A-14563	Sequence 14563, App
C 603	9.8	54.4	19	3	US-09-544-398B-339	Sequence 339, App	C 676	9.8	54.4	25	3	US-09-866-108A-14564	Sequence 14564, App
C 604	9.8	54.4	19	3	US-09-596-791-2046	Sequence 2046, App	C 677	9.8	54.4	25	3	US-09-866-108A-14565	Sequence 14565, App
C 605	9.8	54.4	19	3	US-09-543-771B-339	Sequence 339, App	C 678	9.8	54.4	25	3	US-09-866-108A-14566	Sequence 14566, App
C 606	9.8	54.4	19	3	US-09-543-972C-845	Sequence 845, App	C 679	9.8	54.4	25	3	US-09-866-108A-14567	Sequence 14567, App
C 607	9.8	54.4	19	3	US-09-093-972C-855	Sequence 855, App	C 680	9.8	54.4	25	3	US-09-866-108A-14568	Sequence 14568, App
C 608	9.8	54.4	19	3	US-09-093-972C-942	Sequence 942, App	C 681	9.8	54.4	25	3	US-09-866-108A-14569	Sequence 14569, App

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683	9.8	54.4	25	3	US-09-396-196G-4231	Sequence 4231, Ap
684	9.8	54.4	25	3	US-09-396-196G-6886	Sequence 6886, Ap
685	9.8	54.4	25	3	US-09-396-196G-6887	Sequence 6887, Ap
686	9.8	54.4	25	3	US-09-396-196G-6888	Sequence 6888, Ap
687	9.8	54.4	25	3	US-09-396-196G-8525	Sequence 8525, Ap
688	9.8	54.4	25	3	US-09-396-196G-8526	Sequence 8526, Ap
689	9.8	54.4	25	3	US-09-396-196G-13246	Sequence 13246, A
690	9.8	54.4	25	3	US-09-396-196G-16053	Sequence 16053, A
691	9.8	54.4	25	3	US-09-396-196G-16222	Sequence 16222, A
692	9.8	54.4	25	3	US-09-396-196G-16521	Sequence 16521, A
693	9.8	54.4	25	3	US-09-396-196G-16765	Sequence 16765, A
694	9.8	54.4	25	3	US-09-396-196G-16976	Sequence 16976, A
695	9.8	54.4	25	3	US-09-396-196G-16978	Sequence 16978, A
696	9.8	54.4	25	3	US-09-396-196G-16979	Sequence 16979, A
697	9.8	54.4	25	3	US-09-396-196G-19441	Sequence 19441, A
698	9.8	54.4	25	3	US-09-396-196G-20016	Sequence 20016, A
699	9.8	54.4	25	3	US-09-396-196G-20017	Sequence 20017, A
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706	9.8	54.4	25	3	US-09-396-196G-32477	Sequence 32477, A
707	9.8	54.4	25	3	US-09-396-196G-37378	Sequence 37378, A
708	9.8	54.4	25	3	US-09-396-196G-37748	Sequence 37748, A
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712	9.8	54.4	25	3	US-09-396-196G-44553	Sequence 44553, A
713	9.8	54.4	25	3	US-09-396-196G-45873	Sequence 45873, A
714	9.8	54.4	25	3	US-09-396-196G-50153	Sequence 50153, A
715	9.8	54.4	25	3	US-09-396-196G-53926	Sequence 53926, A
716	9.8	54.4	25	3	US-09-396-196G-54510	Sequence 54510, A
717	9.8	54.4	25	3	US-09-396-196G-55452	Sequence 55452, A
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726	9.8	54.4	25	3	US-09-396-196G-72396	Sequence 72396, A
727	9.8	54.4	25	3	US-09-396-196G-72397	Sequence 72397, A
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729	9.8	54.4	25	3	US-09-396-196G-72399	Sequence 72399, A
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731	9.8	54.4	25	3	US-09-396-196G-73053	Sequence 73053, A
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734	9.8	54.4	25	3	US-09-396-196G-85310	Sequence 85310, A
735	9.8	54.4	25	3	US-09-396-196G-86851	Sequence 86851, A
736	9.8	54.4	25	3	US-09-396-196G-86862	Sequence 86862, A
737	9.8	54.4	25	3	US-09-396-196G-87390	Sequence 87390, A
738	9.8	54.4	25	3	US-09-396-196G-87399	Sequence 87399, A
739	9.8	54.4	25	3	US-09-396-196G-87407	Sequence 87407, A
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746	9.8	54.4	25	3	US-09-396-196G-109620	Sequence 109620, A
747	9.8	54.4	25	3	US-09-396-196G-109698	Sequence 109698, A
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751	9.8	54.4	25	3	US-09-396-196G-115410	Sequence 115410, A
752	9.8	54.4	25	3	US-09-396-196G-115411	Sequence 115411, A
753	9.8	54.4	25	3	US-09-396-196G-117697	Sequence 117697, A
754	9.8	54.4	25	3	US-09-396-196G-118184	Sequence 118184, A
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C 828	9.8	54.4	30	3	US-09-561-190A-10	Sequence 10, Appl	901	9.6	53.3	24	2	US-08-192-941-11	Sequence 11, Appl
C 829	9.6	53.3	17	2	US-08-640-378-22	Sequence 22, Appl	C 902	9.6	53.3	24	2	US-08-053-451B-93	Sequence 93, Appl
C 830	9.6	53.3	17	3	US-09-474-432B-636	Sequence 636, App	C 903	9.6	53.3	24	2	US-08-756-386-50	Sequence 50, Appl
C 831	9.6	53.3	17	3	US-09-476-387-635	Sequence 635, App	C 904	9.6	53.3	24	2	US-08-756-386-66	Sequence 66, Appl
C 832	9.6	53.3	17	3	US-09-866-108A-271	Sequence 271, App	C 905	9.6	53.3	24	2	US-08-823-516-35	Sequence 35, Appl
C 833	9.6	53.3	17	3	US-09-866-108A-272	Sequence 272, App	C 906	9.6	53.3	24	2	US-08-823-516-55	Sequence 55, Appl
C 834	9.6	53.3	18	2	US-08-518-862C-20	Sequence 20, Appl	C 907	9.6	53.3	24	2	US-08-823-516-92	Sequence 88, Appl
C 835	9.6	53.3	18	2	US-09-156-424-12	Sequence 12, Appl	C 908	9.6	53.3	24	2	US-08-823-516-92	Sequence 92, Appl
C 836	9.6	53.3	18	3	US-09-387-341-4	Sequence 4, Appl	C 909	9.6	53.3	24	3	US-08-682-853A-50	Sequence 50, Appl
C 837	9.6	53.3	18	3	US-09-422-978-7578	Sequence 7578, Ap	C 910	9.6	53.3	24	3	US-08-682-853A-66	Sequence 66, Appl
C 838	9.6	53.3	18	3	US-08-983-605-31	Sequence 31, Appl	C 911	9.6	53.3	24	3	US-08-759-038-50	Sequence 50, Appl
C 839	9.6	53.3	18	3	US-09-490-609B-574	Sequence 574, App	C 912	9.6	53.3	24	3	US-08-759-038-66	Sequence 66, Appl
C 840	9.6	53.3	18	3	US-09-931-325C-27	Sequence 27, Appl	C 913	9.6	53.3	24	3	US-08-759-038-70	Sequence 70, Appl
C 841	9.6	53.3	19	3	US-08-987-418A-4	Sequence 4, Appl	C 914	9.6	53.3	24	3	US-08-759-038-75	Sequence 75, Appl
C 842	9.6	53.3	19	3	US-09-343-062-4	Sequence 4, Appl	C 915	9.6	53.3	24	3	US-08-758-314-50	Sequence 50, Appl
C 843	9.6	53.3	20	2	US-08-374-770-7	Sequence 7, Appl	C 916	9.6	53.3	24	3	US-08-758-314-66	Sequence 66, Appl
C 844	9.6	53.3	20	2	US-08-089-996-62	Sequence 62, Appl	C 917	9.6	53.3	24	3	US-08-758-314-70	Sequence 70, Appl
C 845	9.6	53.3	20	2	US-08-461-593B-7	Sequence 7, Appl	C 918	9.6	53.3	24	3	US-08-758-314-75	Sequence 75, Appl
C 846	9.6	53.3	20	2	US-08-651-323A-7	Sequence 7, Appl	C 919	9.6	53.3	24	3	US-09-350-309-50	Sequence 50, Appl
C 847	9.6	53.3	20	2	US-08-478-178A-62	Sequence 62, Appl	C 920	9.6	53.3	24	3	US-09-350-309-50	Sequence 50, Appl
C 848	9.6	53.3	20	2	US-08-488-177-62	Sequence 62, Appl	C 921	9.6	53.3	24	3	US-09-553-867A-24	Sequence 24, Appl
C 849	9.6	53.3	20	2	US-08-481-072A-62	Sequence 62, Appl	C 922	9.6	53.3	24	3	US-09-684-938-50	Sequence 50, Appl
C 850	9.6	53.3	20	2	US-08-664-336-62	Sequence 62, Appl	C 923	9.6	53.3	24	3	US-09-684-938-50	Sequence 50, Appl
C 851	9.6	53.3	20	2	US-08-481-066A-62	Sequence 62, Appl	C 924	9.6	53.3	24	3	US-09-684-938-70	Sequence 70, Appl
C 852	9.6	53.3	20	3	US-08-578-615A-62	Sequence 62, Appl	C 925	9.6	53.3	24	3	US-09-684-938-75	Sequence 75, Appl
C 853	9.6	53.3	20	3	US-09-089-195-20	Sequence 20, Appl	C 926	9.6	53.3	24	3	US-09-308-825A-50	Sequence 50, Appl
C 854	9.6	53.3	20	3	US-09-089-195-22	Sequence 22, Appl	C 927	9.6	53.3	24	3	US-09-308-825A-66	Sequence 66, Appl
C 855	9.6	53.3	20	3	US-09-135-021-28	Sequence 28, Appl	C 928	9.6	53.3	24	3	US-09-308-825A-70	Sequence 70, Appl
C 856	9.6	53.3	20	3	US-09-011-526-5	Sequence 52, Appl	C 929	9.6	53.3	24	3	US-09-308-825A-75	Sequence 75, Appl
C 857	9.6	53.3	20	3	US-09-487-445-52	Sequence 52, Appl	C 930	9.6	53.3	24	3	US-09-940-244-33	Sequence 33, Appl
C 858	9.6	53.3	20	3	US-09-135-020-30	Sequence 30, Appl	C 931	9.6	53.3	24	3	US-09-940-244-55	Sequence 55, Appl
C 859	9.6	53.3	20	3	US-09-135-010A-30	Sequence 30, Appl	C 932	9.6	53.3	24	3	US-09-940-244-88	Sequence 88, Appl
C 860	9.6	53.3	20	3	US-09-444-871-30	Sequence 30, Appl	C 933	9.6	53.3	24	3	US-09-940-244-92	Sequence 92, Appl
C 861	9.6	53.3	20	3	US-08-829-637A-62	Sequence 62, Appl	C 934	9.6	53.3	24	3	US-09-333-145-50	Sequence 50, Appl
C 862	9.6	53.3	20	3	US-09-545-435-6	Sequence 62, Appl	C 935	9.6	53.3	24	3	US-09-333-145-66	Sequence 66, Appl
C 863	9.6	53.3	20	3	US-09-597-735-30	Sequence 30, Appl	C 936	9.6	53.3	24	3	US-09-851-670-23	Sequence 23, Appl
C 864	9.6	53.3	20	3	US-09-444-295-30	Sequence 30, Appl	C 937	9.6	53.3	24	3	US-09-559-867-24	Sequence 24, Appl
C 865	9.6	53.3	20	3	US-09-964-850-7	Sequence 7, Appl	C 938	9.6	53.3	24	3	US-09-381-212-39	Sequence 39, Appl
C 866	9.6	53.3	20	3	US-09-597-732-30	Sequence 30, Appl	C 939	9.6	53.3	24	3	US-09-381-212-55	Sequence 55, Appl
C 867	9.6	53.3	20	3	US-09-322-409-13	Sequence 13, Appl	C 940	9.6	53.3	24	3	US-09-381-212-88	Sequence 88, Appl
C 868	9.6	53.3	20	3	US-09-451-527-13	Sequence 13, Appl	C 941	9.6	53.3	24	3	US-09-381-212-92	Sequence 92, Appl
C 869	9.6	53.3	20	3	US-10-025-139-62	Sequence 62, Appl	C 942	9.6	53.3	24	3	US-10-081-806-50	Sequence 50, Appl
C 870	9.6	53.3	20	3	US-09-198-452A-5222	Sequence 5222, Ap	C 943	9.6	53.3	24	3	US-10-081-806-66	Sequence 66, Appl
C 871	9.6	53.3	20	3	US-09-597-731-30	Sequence 30, Appl	C 944	9.6	53.3	24	3	US-09-713-601A-39	Sequence 39, Appl
C 872	9.6	53.3	20	3	US-09-548-797B-132	Sequence 132, App	C 945	9.6	53.3	24	3	US-09-713-601A-55	Sequence 55, Appl
C 873	9.6	53.3	20	3	US-08-983-605-112	Sequence 112, App	C 946	9.6	53.3	24	3	US-09-713-601A-88	Sequence 88, Appl
C 874	9.6	53.3	20	6	PCT-US94-07770-62	Sequence 62, Appl	C 947	9.6	53.3	24	3	US-09-713-601A-92	Sequence 92, Appl
C 875	9.6	53.3	21	2	US-08-599-491-46	Sequence 46, Appl	C 948	9.6	53.3	25	2	US-08-484-956-75	Sequence 75, Appl
C 876	9.6	53.3	21	2	US-08-756-386-46	Sequence 46, Appl	C 949	9.6	53.3	25	2	US-08-757-653-75	Sequence 75, Appl
C 877	9.6	53.3	21	2	US-08-823-516-35	Sequence 35, Appl	C 950	9.6	53.3	25	2	US-08-761-243C-8	Sequence 8, Appl
C 878	9.6	53.3	21	3	US-08-682-853A-46	Sequence 46, Appl	C 951	9.6	53.3	25	2	US-08-053-451B-92	Sequence 92, Appl
C 879	9.6	53.3	21	3	US-08-759-038A-46	Sequence 46, Appl	C 952	9.6	53.3	25	3	US-08-520-946-75	Sequence 75, Appl
C 880	9.6	53.3	21	3	US-08-105-907-14	Sequence 14, Appl	C 953	9.6	53.3	25	3	US-09-579-365-4	Sequence 4, Appl
C 881	9.6	53.3	21	3	US-09-105-907-13	Sequence 13, Appl	C 954	9.6	53.3	25	3	US-09-927-842-36	Sequence 36, Appl
C 882	9.6	53.3	21	3	US-09-578-378-13	Sequence 13, Appl	C 955	9.6	53.3	25	3	US-09-655-378A-75	Sequence 75, Appl
C 883	9.6	53.3	21	3	US-09-350-309-46	Sequence 46, Appl	C 956	9.6	53.3	25	3	US-09-866-108A-3200	Sequence 3200, Ap
C 884	9.6	53.3	21	3	US-09-455-960-19	Sequence 19, Appl	C 957	9.6	53.3	25	3	US-09-866-108A-3201	Sequence 3201, Ap
C 885	9.6	53.3	21	3	US-09-099-053-19	Sequence 19, Appl	C 958	9.6	53.3	25	3	US-09-866-108A-3202	Sequence 3202, Ap
C 886	9.6	53.3	21	3	US-09-328-174A-110	Sequence 110, App	C 959	9.6	53.3	25	3	US-09-866-108A-3203	Sequence 3203, Ap
C 887	9.6	53.3	21	3	US-09-684-938A-46	Sequence 46, Appl	C 960	9.6	53.3	25	3	US-09-866-108A-3204	Sequence 3204, Ap
C 888	9.6	53.3	21	3	US-09-308-825A-46	Sequence 46, Appl	C 961	9.6	53.3	25	3	US-09-866-108A-3205	Sequence 3205, Ap
C 889	9.6	53.3	21	3	US-09-940-244-35	Sequence 35, Appl	C 962	9.6	53.3	25	3	US-09-866-108A-3206	Sequence 3206, Ap
C 890	9.6	53.3	21	3	US-09-333-145-46	Sequence 46, Appl	C 963	9.6	53.3	25	3	US-09-866-108A-3207	Sequence 3207, Ap
C 891	9.6	53.3	21	3	US-10-051-325-19	Sequence 19, Appl	C 964	9.6	53.3	25	3	US-09-866-108A-3208	Sequence 3208, Ap
C 892	9.6	53.3	21	3	US-09-657-472-546	Sequence 546, App	C 965	9.6	53.3	25	3	US-09-866-108A-3209	Sequence 3209, Ap
C 893	9.6	53.3	21	3	US-09-381-212-35	Sequence 35, Appl	C 966	9.6	53.3	25	3	US-09-396-196G-1436	Sequence 1436, Ap
C 894	9.6	53.3	21	3	US-10-081-806-46	Sequence 46, Appl	C 967	9.6	53.3	25	3	US-09-396-196G-2634	Sequence 2634, Ap
C 895	9.6	53.3	21	3	US-09-713-601A-35	Sequence 35, Appl	C 968	9.6	53.3	25	3	US-09-396-196G-5332	Sequence 5332, Ap
C 896	9.6	53.3	23	2	US-08-373-116A-51	Sequence 51, Appl	C 969	9.6	53.3	25	3	US-09-396-196G-7087	Sequence 7087, Ap
C 897	9.6	53.3	23	2	US-08-053-451B-94	Sequence 94, Appl	C 970	9.6	53.3	25	3	US-09-396-196G-7748	Sequence 7748, Ap
C 898	9.6	53.3	23	2	US-08-859-998-681	Sequence 681, App	C 971	9.6	53.3	25	3	US-09-396-196G-8889	Sequence 8889, Ap
C 899	9.6	53.3	23	3	US-09-225-928-681	Sequence 681, App	C 972	9.6	53.3	25	3	US-09-396-196G-9540	Sequence 9540, Ap
C 900	9.6	53.3	23	3	US-09-225-201B-681	Sequence 681, App	C 973	9.6	53.3	25	3	US-09-396-196G-9540	Sequence 9540, Ap

974 9.6 53.3 25 3 US-09-396-196G-10205 Sequence 10205, A  
975 9.6 53.3 25 3 US-09-396-196G-11796 Sequence 11796, A  
976 9.6 53.3 25 3 US-09-396-196G-11797 Sequence 11797, A  
977 9.6 53.3 25 3 US-09-396-196G-20526 Sequence 20526, A  
978 9.6 53.3 25 3 US-09-396-196G-24552 Sequence 24552, A  
979 9.6 53.3 25 3 US-09-396-196G-24553 Sequence 24553, A  
980 9.6 53.3 25 3 US-09-396-196G-28724 Sequence 28724, A  
981 9.6 53.3 25 3 US-09-396-196G-28725 Sequence 28725, A  
982 9.6 53.3 25 3 US-09-396-196G-31402 Sequence 31402, A  
983 9.6 53.3 25 3 US-09-396-196G-38542 Sequence 38542, A  
984 9.6 53.3 25 3 US-09-396-196G-39167 Sequence 39167, A  
985 9.6 53.3 25 3 US-09-396-196G-39185 Sequence 39185, A  
986 9.6 53.3 25 3 US-09-396-196G-39961 Sequence 39961, A  
987 9.6 53.3 25 3 US-09-396-196G-40713 Sequence 40713, A  
988 9.6 53.3 25 3 US-09-396-196G-40714 Sequence 40714, A  
989 9.6 53.3 25 3 US-09-396-196G-41133 Sequence 41133, A  
990 9.6 53.3 25 3 US-09-396-196G-41595 Sequence 41595, A  
991 9.6 53.3 25 3 US-09-396-196G-43568 Sequence 43568, A  
992 9.6 53.3 25 3 US-09-396-196G-45886 Sequence 45886, A  
993 9.6 53.3 25 3 US-09-396-196G-47334 Sequence 47334, A  
994 9.6 53.3 25 3 US-09-396-196G-47586 Sequence 47586, A  
995 9.6 53.3 25 3 US-09-396-196G-47587 Sequence 47587, A  
996 9.6 53.3 25 3 US-09-396-196G-47791 Sequence 47791, A  
997 9.6 53.3 25 3 US-09-396-196G-47809 Sequence 47809, A  
998 9.6 53.3 25 3 US-09-396-196G-53819 Sequence 53819, A  
999 9.6 53.3 25 3 US-09-396-196G-56240 Sequence 56240, A  
1000 9.6 53.3 25 3 US-09-396-196G-57431 Sequence 57431, A

## ALIGNMENTS

RESULT 1  
US-08-217-082A-17  
Sequence 17, Application US/08217082A  
GENERAL INFORMATION:  
APPLICANT: Reed, John  
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES FOR INHIBITING THE  
TITLE OF INVENTION: GROWTH OF CELLS EXPRESSING THE HUMAN BCL-2 GENE  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,  
STREET: 224 Airport Parkway  
CITY: San Jose  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 95110  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/217,082A  
FILING DATE: 24-MAR-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/840,716  
FILING DATE: 21-FEB-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/288,692  
FILING DATE: 22-DEC-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Fortney, Andrew D.  
REGISTRATION NUMBER: 34,600  
REFERENCE/DOCKET NUMBER: 3335-067-55 FWC  
TELEPHONE: (408) 436-2070  
TELEFAX: (408) 436-2075  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:

LENGTH: 18 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: Synthetic DNA  
US-08-217-082A-17

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 2  
US-08-465-485A-17  
Sequence 17, Application US/08465485A  
GENERAL INFORMATION:  
APPLICANT: Reed, John  
TITLE OF INVENTION: Regulation of bcl-2 Gene Expression  
NUMBER OF SEQUENCES: 29  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,  
STREET: 1755 S. Jefferson Davis Hwy., Suite 400  
CITY: Arlington  
STATE: Virginia  
COUNTRY: U.S.A.  
ZIP: 22202  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/465,485A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/124,256  
FILING DATE: 20-SEP-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/840,716  
FILING DATE: 21-FEB-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/288,692  
FILING DATE: 22-DEC-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Fortney, Andrew D.  
REGISTRATION NUMBER: 34,600  
REFERENCE/DOCKET NUMBER: 3335-070-55 CONT  
TELEPHONE: (408) 436-2070  
TELEFAX: (408) 436-2075  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-465-485A-17

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 3  
US-08-465-485A-24  
; Sequence 24, Application US/08465485A  
; Patent No. 5831066  
; GENERAL INFORMATION:  
; APPLICANT: Reed, John  
; TITLE OF INVENTION: Regulation of bcl-2 Gene Expression  
; NUMBER OF SEQUENCES: 29  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
; P.C.  
; STREET: 1755 S. Jefferson Davis Hwy., Suite 400  
; CITY: Arlington  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22202  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/465,485A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/124,256  
; FILING DATE: 20-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/840,716  
; FILING DATE: 21-FEB-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/288,692  
; FILING DATE: 22-DEC-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fortney, Andrew D.  
; REGISTRATION NUMBER: 34,600  
; REFERENCE/DOCKET NUMBER: 3335-070-55 CONT  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (408) 436-2070  
; TELEFAX: (408) 436-2075  
; INFORMATION FOR SEQ. ID NO: 24:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: Other nucleic acid;  
; DESCRIPTION: Synthetic DNA  
; ANTI-SENSE: YES.  
; FEATURE:  
; NAME/KEY: Modified\_base  
; LOCATION: 16..17  
; OTHER INFORMATION: Last two internucleoside linkages are  
; OTHER INFORMATION: phosphorothioates  
US-08-465-485A-24  
Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 4  
US-09-080-285-17  
; Sequence 17, Application US/09080285  
; Patent No. 6040181  
; GENERAL INFORMATION:

APPLICANT: Reed, John  
; TITLE OF INVENTION: Regulation of bcl-2 Gene Expression  
; NUMBER OF SEQUENCES: 29  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
; P.C.  
; STREET: 1755 S. Jefferson Davis Hwy., Suite 400  
; CITY: Arlington  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22202  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/080,285  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/465,485  
; FILING DATE: 05-JUN-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/124,256  
; FILING DATE: 20-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/840,716  
; FILING DATE: 21-FEB-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/288,692  
; FILING DATE: 22-DEC-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fortney, Andrew D.  
; REGISTRATION NUMBER: 34,600  
; REFERENCE/DOCKET NUMBER: 3335-070-55 CONT  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (408) 436-2070  
; TELEFAX: (408) 436-2075  
; INFORMATION FOR SEQ. ID NO: 17:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-09-080-285-17  
Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 5  
US-09-080-285-24  
; Sequence 24, Application US/09080285  
; Patent No. 6040181  
; GENERAL INFORMATION:  
; APPLICANT: Reed, John  
; TITLE OF INVENTION: Regulation of bcl-2 Gene Expression  
; NUMBER OF SEQUENCES: 29  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
; P.C.  
; STREET: 1755 S. Jefferson Davis Hwy., Suite 400  
; CITY: Arlington  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22202  
; COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/080,285  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/465,485  
FILING DATE: 05-JUN-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/124,256  
FILING DATE: 20-SEP-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/840,716  
FILING DATE: 21-FEB-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/288,692  
FILING DATE: 22-DEC-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Fortney, Andrew D.  
REGISTRATION NUMBER: 34,600  
REFERENCE/DOCKET NUMBER: 3335-070-55 CONT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (408) 436-2070  
TELEFAX: (408) 436-2075  
INFORMATION FOR SEQ ID NO: 24:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: Other nucleic acid;  
DESCRIPTION: Synthetic DNA  
FEATURE:  
ANTI-SENSE: YES  
NAME/KEY: Modified\_base  
LOCATION: 16..17  
OTHER INFORMATION: Last two internucleoside linkages are  
OTHER INFORMATION: phosphorothioates  
US-09-080-285-24

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 6  
US-09-249-730-218  
Sequence 218, Application US/09249730  
Patent No. 6121000  
GENERAL INFORMATION:  
APPLICANT: WRIGHT, Jim A.  
APPLICANT: YOUNG, Aiping H.  
TITLE OF INVENTION: Anticumor Antisense Sequences Directed Against R1 and  
TITLE OF INVENTION: R2 Components of Ribonucleotide Reductase  
FILE REFERENCE: 032396-040  
CURRENT APPLICATION NUMBER: US/09/249,730  
CURRENT FILING DATE: 1999-02-11  
NUMBER OF SEQ ID NOS: 220  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 218  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Human  
US-09-249-730-218

Query Match 100.0%; Score 18; DB 3; Length 18;

Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 7  
US-09-118-220-1  
Sequence 1, Application US/09118220  
Patent No. 6140051  
GENERAL INFORMATION:  
APPLICANT: Brown, Lauren R.  
APPLICANT: Xu, Cheng  
TITLE OF INVENTION: FLUORESCENT DIBENZAZOLE DERIVATIVES  
TITLE OF INVENTION: AND METHODS RELATED THERETO  
NUMBER OF SEQUENCES: 1  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Knobb, Martens, Olson & Bear  
STREET: 620 Newport Center Drive, 16th Floor  
CITY: Newport Beach  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 92660  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM compatible  
OPERATING SYSTEM: Windows  
SOFTWARE: FastSeq for Windows Version 2.0b  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/118,220  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bartfeld, Neil S  
REGISTRATION NUMBER: 39,901  
REFERENCE/DOCKET NUMBER: GENTA.050A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-235-8550  
TELEFAX: 619-235-0176  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-09-118-220-1

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 8  
US-08-738-652-55  
Sequence 55, Application US/08738652B  
Patent No. 6207646  
GENERAL INFORMATION:  
APPLICANT: Krieg, Arthur M.  
TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
FILE REFERENCE: C1039/7004 HCL  
CURRENT APPLICATION NUMBER: US/08/738,652B  
CURRENT FILING DATE: 1996-10-30



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; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-55
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Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
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RESULT 9
US-09-030-701-27
; Sequence 27, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schwartz, David A.
; TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING
; TITLE OF INVENTION: UNMETHYLATED CPG DINUCLEOTIDE IN THE TREATMENT OF
; TITLE OF INVENTION: LPS-ASSOCIATED DISORDERS
; FILE REFERENCE: C1039/7011
; CURRENT APPLICATION NUMBER: US/09/030,701B
; CURRENT FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/039,405
; PRIOR FILING DATE: 1997-02-28
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 27
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-27
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Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
```

```
RESULT 10
US-09-286-098-59
; Sequence 59, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
```

```
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 59
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-59
```

```
Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
```

```
RESULT 11
US-09-286-098-104
; Sequence 104, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 104
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-104
```

```
Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
```

```
RESULT 12
US-08-960-774-45
; Sequence 45, Application US/08960774
; Patent No. 6239116
; GENERAL INFORMATION:
; APPLICANT: Krieg et al.,
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Pihl & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
```

APPLICATION NUMBER: US/08/960,774  
FILING DATE: 30-October-1997  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652  
FILING DATE: October 30, 1996  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Haile, Lisa A.  
REGISTRATION NUMBER: 38,347  
REFERENCE/DOCKET NUMBER: 08918/012001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619/678-5070  
TELEFAX: 619/678-5099  
INFORMATION FOR SEQ ID NO: 45:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-960-774-45

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 13  
US-09-078-954-14  
Sequence 14, Application US/09078954  
Patent No. 6287591  
GENERAL INFORMATION:  
APPLICANT: SEMPLE, Sean C.  
APPLICANT: Klimuk, Sandra K.  
APPLICANT: Harasym, Troy  
APPLICANT: Hope, Michael J.  
APPLICANT: Ansell, Steven M.  
APPLICANT: Cullis, Pieter  
APPLICANT: Scheerer, Peter  
APPLICANT: Geisler, Timothy  
APPLICANT: Zon, Gerald  
APPLICANT: Debever, Dan  
TITLE OF INVENTION: High Efficiency Encapsulation of Charged Therapeutic Agents in  
TITLE OF INVENTION: Lipid Vesicles  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Oppedahl & Larson  
STREET: PO Box 5270  
CITY: Friebco  
STATE: CO  
COUNTRY: USA  
ZIP: 80443-5270  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS 5.0  
SOFTWARE: Word Perfect  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/078,954  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/856,374  
FILING DATE: 14-MAY-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Marina T. Larson  
REGISTRATION NUMBER: 32,038  
REFERENCE/DOCKET NUMBER: INEX.P-003

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (970) 668-2050  
TELEFAX: (970) 668-2082  
TELEX:  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
HYPOTHETICAL: no  
ANTI-SENSE: yes  
US-09-078-954-14

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 14  
US-09-325-193A-51  
Sequence 51, Application US/09325193A  
Patent No. 6406705  
GENERAL INFORMATION:  
APPLICANT: Davis, Heather L.  
APPLICANT: Schorr, Joachim  
APPLICANT: Kried, Arthur M.  
TITLE OF INVENTION: Use of Nucleic Acids Containing  
TITLE OF INVENTION: Uremethylated Cpg Dinucleotide as an Adjuvant  
FILE REFERENCE: C1039/7025/HCL  
CURRENT APPLICATION NUMBER: US/09/325,193A  
CURRENT FILING DATE: 1999-06-03  
PRIOR FILING DATE: 1998-09-16  
PRIOR APPLICATION NUMBER: US 09/154,614  
PRIOR FILING DATE: 1998-09-16  
PRIOR APPLICATION NUMBER: PCT/US98/04703  
PRIOR FILING DATE: 1998-03-10  
PRIOR APPLICATION NUMBER: US 60/040,376  
PRIOR FILING DATE: 1997-03-10  
NUMBER OF SEQ ID NOS: 98  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 51  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Oligonucleotide  
US-09-325-193A-51

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 15  
US-09-724-426-17  
Sequence 17, Application US/09724426  
Patent No. 6414134  
GENERAL INFORMATION:  
APPLICANT: Reed, John  
TITLE OF INVENTION: Regulation of BCL-2 Gene Expression  
FILE REFERENCE: 10412-024  
CURRENT APPLICATION NUMBER: US/09/724,426  
CURRENT FILING DATE: 2000-11-28  
NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn version 3.0  
SEQ ID NO 17  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-724-426-17

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 16  
US-09-724-426-24  
Sequence 24, Application US/09724426  
Patent No. 6414134  
GENERAL INFORMATION:  
APPLICANT: Reed, John  
TITLE OF INVENTION: Regulation of BCL-2 Gene Expression  
FILE REFERENCE: 10412-024  
CURRENT APPLICATION NUMBER: US/09/724,426  
CURRENT FILING DATE: 2000-11-28  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 24  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-724-426-24

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 17  
US-09-191-170-53  
Sequence 53, Application US/09191170  
Patent No. 6429199  
GENERAL INFORMATION:  
APPLICANT: Kriegl, Arthur M.  
APPLICANT: Hartmann, Gunther  
TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
TITLE OF INVENTION: for Activating Dendritic Cells  
FILE REFERENCE: C1039/7017  
CURRENT APPLICATION NUMBER: US/09/191,170  
CURRENT FILING DATE: 1998-11-13  
EARLIER APPLICATION NUMBER: US 08/960,774  
EARLIER FILING DATE: 1997-10-30  
EARLIER APPLICATION NUMBER: US 08/738,652  
EARLIER FILING DATE: 1996-10-30  
EARLIER APPLICATION NUMBER: US 08/386,063  
EARLIER FILING DATE: 1995-02-07  
EARLIER APPLICATION NUMBER: US 08/276,358  
EARLIER FILING DATE: 1994-07-15  
NUMBER OF SEQ ID NOS: 99  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 53  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: synthetic oligonucleotide  
US-09-191-170-53

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 18  
US-09-136-080E-45  
Sequence 45, Application US/09136080E  
Patent No. 6518017  
GENERAL INFORMATION:  
APPLICANT: Riley, Timothy A.  
APPLICANT: Brown, Bob D.  
APPLICANT: Arnold, Lyle J.  
TITLE OF INVENTION: COMBINATORIAL ANTISENSE LIBRARY  
FILE REFERENCE: OASBIO.003A  
CURRENT APPLICATION NUMBER: US/09/136,080E  
CURRENT FILING DATE: 1998-08-18  
NUMBER OF SEQ ID NOS: 54  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 45  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: synthetic oligonucleotide  
US-09-136-080E-45

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 19  
US-09-690-921-2  
Sequence 2, Application US/09690921  
Patent No. 6544518  
GENERAL INFORMATION:  
APPLICANT: Friede, Martin  
APPLICANT: Gerard, Catherine  
APPLICANT: Hermand, Philippe  
TITLE OF INVENTION: Vaccines  
FILE REFERENCE: B45181-1  
CURRENT APPLICATION NUMBER: US/09/690,921  
CURRENT FILING DATE: 2000-10-18  
PRIOR APPLICATION NUMBER: PCT/EP00/02920  
PRIOR FILING DATE: 2000-04-04  
PRIOR APPLICATION NUMBER: 09/301,829  
PRIOR FILING DATE: 1999-04-29  
PRIOR APPLICATION NUMBER: 9908885.8  
PRIOR FILING DATE: 1999-04-19  
NUMBER OF SEQ ID NOS: 5  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 2  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Human  
US-09-690-921-2

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 20

US-09-301-829A-2  
; Sequence 2, Application US/09301829A  
; Patent No. 6558670  
; GENERAL INFORMATION:  
; APPLICANT: Friede, Martin  
; APPLICANT: Hermand, Philippe  
; TITLE OF INVENTION: VACCINES  
; FILE REFERENCE: B45181  
; CURRENT APPLICATION NUMBER: US/09/301,829A  
; CURRENT FILING DATE: 1999-04-29  
; PRIOR APPLICATION NUMBER: GB990885.8  
; PRIOR FILING DATE: 1999-04-19  
; NUMBER OF SEQ ID NOS: 3  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: one or more CpG motifs  
US-09-301-829A-2

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 21

US-09-249-247-218  
; Sequence 218, Application US/09249247  
; Patent No. 6593305  
; GENERAL INFORMATION:  
; APPLICANT: WRIGHT, Jim A.  
; APPLICANT: YOUNG, Aiping H.  
; TITLE OF INVENTION: Anticancer Antisense Sequences Directed Against R1 and  
; FILE REFERENCE: 032396-023  
; CURRENT APPLICATION NUMBER: US/09/249,247  
; CURRENT FILING DATE: 1999-02-11  
; EARLIER APPLICATION NUMBER: US 60/023,040  
; EARLIER FILING DATE: 1996-08-02  
; EARLIER APPLICATION NUMBER: US 60/039,959  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: US 08/904,901  
; EARLIER FILING DATE: 1997-08-01  
; NUMBER OF SEQ ID NOS: 220  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 218  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Human  
US-09-249-247-218

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 22  
US-09-337-619-45  
; Sequence 45, Application US/09337619

; Patent No. 6653292  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; TITLE OF INVENTION: Methods of Treating Cancer Using  
; FILE REFERENCE: C1039/7021/HCL  
; CURRENT APPLICATION NUMBER: US/09/337,619  
; CURRENT FILING DATE: 1999-06-21  
; EARLIER APPLICATION NUMBER: US 08/960,774  
; EARLIER FILING DATE: 1997-10-30  
; EARLIER APPLICATION NUMBER: US 08/738,652  
; EARLIER FILING DATE: 1996-10-30  
; EARLIER APPLICATION NUMBER: US 08/386,063  
; EARLIER FILING DATE: 1995-02-07  
; EARLIER APPLICATION NUMBER: US 08/276,358  
; EARLIER FILING DATE: 1994-07-15  
; NUMBER OF SEQ ID NOS: 123  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 45  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
US-09-337-619-45

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 23

US-09-835-370-21  
; Sequence 21, Application US/09835370  
; Patent No. 6777544  
; GENERAL INFORMATION:  
; APPLICANT: UHLMANN, EUGEN  
; APPLICANT: BREIPOHL, GERHARD  
; APPLICANT: WILLY, DAVID W  
; TITLE OF INVENTION: POLYAMIDE NUCLEIC ACID DERIVATIVES AND AGENTS AND  
; FILE REFERENCE: 02481.1742 SEQUENCE LISTING  
; CURRENT APPLICATION NUMBER: US/09/835,370  
; CURRENT FILING DATE: 2001-04-17  
; NUMBER OF SEQ ID NOS: 64  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 21  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: nucleotide  
; OTHER INFORMATION: base sequence of PNA derivatives that bind to  
; OTHER INFORMATION: viral and cellular targets  
US-09-835-370-21

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 24  
US-09-634-320-7/c  
; Sequence 7, Application US/09634320  
; Patent No. 6822086

```
/ GENERAL INFORMATION:
/ APPLICANT: Papisov, Mikhail, I.
/ TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF
/ FILE REFERENCE: 0838.1003-001
/ CURRENT FILING DATE: 2000-08-09
/ PRIOR APPLICATION NUMBER: US 60/147,919
/ PRIOR FILING DATE: 1999-08-09
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 7
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Oligonucleotide
US-09-634-320-7

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18
Db 18 TCTCCAGCGTGGCCAT 1

RESULT 25
US-09-654-373-14
/ Sequence 14, Application US/09654373
/ Patent No. 6835395
/ GENERAL INFORMATION:
/ APPLICANT: SEMPLE, Sean C.
/ Klimuk, Sandra K.
/ Harsaym, Troy O.
/ Dos Santos, Nancy
/ Ansell, Steven M.
/ Cullis, Pieter R.
/ Hope, Michael J.
/ Scherzer, Peter
/ McIntosh, Deidre
/ Wong, Kim F.
/ TITLE OF INVENTION: Small Multilamellar Oligodeoxynucleotide-Containing
/ Lipid Vesicles and Method of Making Same
/ NUMBER OF SEQUENCES: 17
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Oppedahl & Larson LLP
/ STREET: PO Box 5068
/ CITY: Dillon
/ STATE: CO
/ COUNTRY: USA
/ ZIP: 80435-5068
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb
/ OPERATING SYSTEM: DOS 5.0
/ SOFTWARE: Word Perfect
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/654,373
/ FILING DATE: 01-Sep-2000
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 60/152,179
/ FILING DATE: SEPTEMBER 2, 1999
/ APPLICATION NUMBER: 09/078,954
/ FILING DATE: MAY 14, 1998
/ APPLICATION NUMBER: 08/856,374
/ FILING DATE: MAY 14, 1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Marina T. Larson
/ REGISTRATION NUMBER: 32,038
```

```
/ REFERENCE/DOCKET NUMBER: INEX.P-007
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (970) 468-6600
/ TELEFAX: (970) 468-0104
/ TELEX: <Unknown>
/ INFORMATION FOR SEQ ID NO: 14:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 18
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ HYPOTHETICAL: no
/ ANTI-SENSE: yes
/ SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-654-373-14

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 26
US-09-724-425-17
/ Sequence 17, Application US/09724425
/ Patent No. 6841541
/ GENERAL INFORMATION:
/ APPLICANT: Reed, John C.
/ TITLE OF INVENTION: REGULATION OF BCL-2 GENE EXPRESSION
/ FILE REFERENCE: 04040/1200990-US7
/ CURRENT FILING DATE: 2000-11-28
/ PRIOR APPLICATION NUMBER: US 09/724,425
/ PRIOR FILING DATE: 1999-08-17
/ PRIOR FILING DATE: 1999-08-17
/ PRIOR FILING DATE: 1998-05-18
/ PRIOR FILING DATE: 1995-06-05
/ PRIOR FILING DATE: 1995-06-05
/ PRIOR FILING DATE: 1993-09-20
/ PRIOR FILING DATE: 1993-09-20
/ PRIOR FILING DATE: 1992-02-21
/ PRIOR FILING DATE: 1992-02-21
/ PRIOR FILING DATE: 1988-12-22
/ NUMBER OF SEQ ID NOS: 29
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 17
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-09-724-425-17

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 27
US-09-724-425-24
/ Sequence 24, Application US/09724425
/ Patent No. 6841541
/ GENERAL INFORMATION:
/ APPLICANT: Reed, John C.
/ TITLE OF INVENTION: REGULATION OF BCL-2 GENE EXPRESSION
/ FILE REFERENCE: 04040/1200990-US7
```

CURRENT APPLICATION NUMBER: US/09/724,425  
CURRENT FILING DATE: 2000-11-28  
PRIOR APPLICATION NUMBER: US 09/375,514  
PRIOR FILING DATE: 1999-08-17  
PRIOR APPLICATION NUMBER: US 09/080,285  
PRIOR FILING DATE: 1998-05-18  
PRIOR APPLICATION NUMBER: US 08/465,485  
PRIOR FILING DATE: 1995-06-05  
PRIOR APPLICATION NUMBER: US 08/124,256  
PRIOR FILING DATE: 1993-09-20  
PRIOR APPLICATION NUMBER: US 07/840,716  
PRIOR FILING DATE: 1992-02-21  
PRIOR APPLICATION NUMBER: US 07/288,692  
PRIOR FILING DATE: 1988-12-22  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 24  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-724-425-24

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 28  
US-09-895-480A-14  
Sequence 14, Application US/09895480A  
Patent No. 6858225  
GENERAL INFORMATION:  
APPLICANT: Inex Pharmaceuticals Inc.  
TITLE OF INVENTION: High Efficiency Encapsulation of Charged Therapeutic Agents in Lipid Vesicles  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Opedahl & Larson LLP  
STREET: PO Box 5068  
CITY: Dillon  
STATE: CO  
COUNTRY: US  
ZIP: 80435  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS 5.0  
SOFTWARE: Word Perfect  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/895,480A  
FILING DATE: 29-Jun-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: <Unknown>  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: <Unknown>  
REGISTRATION NUMBER: <Unknown>  
REFERENCE/DOCKET NUMBER: <Unknown>  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: <Unknown>  
TELEFAX: <Unknown>  
TELEX: <Unknown>  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18  
TYPE: nucleic acid  
STRANDEDNESS: single

TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
HYPOTHETICAL: no  
ANTI-SENSE: yes  
SEQUENCE DESCRIPTION: SEQ ID NO: 14:  
US-09-895-480A-14

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 29  
US-10-002-884A-6  
Sequence 6, Application US/10002884A  
Patent No. 6867043  
GENERAL INFORMATION:  
APPLICANT: Stein, Cy A  
APPLICANT: Benimetskaya, Lyuba  
APPLICANT: Guzzo-Bernelli, Nancy  
TITLE OF INVENTION: PEPTIDES THAT COMPLEX WITH ANTISENSE OLIGONUCLEOTIDES WHICH DOWNR  
TITLE OF INVENTION: PKC-PROTEIN EXPRESSION IN CELLS  
FILE REFERENCE: 0575/63293  
CURRENT APPLICATION NUMBER: US/10/002,884A  
CURRENT FILING DATE: 2001-11-02  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 6  
LENGTH: 18  
TYPE: DNA  
ORGANISM: ARTIFICIAL SEQUENCE  
FEATURE:  
OTHER INFORMATION: ANTISENSE OLIGONUCLEOTIDE  
US-10-002-884A-6

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 30  
US-09-108-673A-34  
Sequence 34, Application US/09108673A  
Patent No. 6887906  
GENERAL INFORMATION:  
APPLICANT: Ching-Leou Teng and Greg Hardie  
TITLE OF INVENTION: Compositions and Methods for the Delivery of Oligonucleotides Via the Alimentary Canal  
NUMBER OF SEQUENCES: 132  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6887906cris LLP  
STREET: One Liberty Place, 46th Floor  
CITY: Philadelphia  
STATE: PA  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: PC-DOS  
SOFTWARE: WORDPERFECT 6.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/108,673A  
FILING DATE: July 1, 1998  
CLASSIFICATION: 514

```

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 06/886,829
; FILING DATE: 01-JUL-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul K. Legaard
; REGISTRATION NUMBER: 38,534
; REFERENCE/DOCKET NUMBER: ISIS-3105
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 34:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: Yes
; FEATURE:
; OTHER INFORMATION: Antisense to bcl-2 mRNA, a.k.a. "BCL-2"
; PUBLICATION INFORMATION:
; DOCUMENT NUMBER: WO 95/08350 (SEQ ID NO:17)
; FILING DATE: 20-SEP-1994
; PUBLICATION DATE: 30-MAR-1995
; US-09-108-673A-34

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGGTGGCCCAT 18

RESULT 31
US-09-835-371-21
; Sequence 21, Application US/09835371
; Patent No. 6905820
; GENERAL INFORMATION:
; APPLICANT: UHLMANN, Eugen
; APPLICANT: BREIPOHL, Gerhard
; APPLICANT: WILT, David W
; TITLE OF INVENTION: POLYAMIDE NUCLEIC ACID DERIVATIVES, AND AGENTS AND
; TITLE OF INVENTION: PROCESSES FOR PREPARING THEM
; FILE REFERENCE: 02481.1743 SEQUENCE LISTING
; CURRENT APPLICATION NUMBER: US/09/835,371
; NUMBER OF SEQ ID NOS: 53
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: base sequence
; OTHER INFORMATION: of PNA targeting CMV
; US-09-835-371-21

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGGTGGCCCAT 18

RESULT 32
US-09-954-987B-115
; Sequence 115, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
```

```

; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CPG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AMS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 115
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; US-09-954-987B-115

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGGTGGCCCAT 18

RESULT 33
US-09-672-126B-110
; Sequence 110, Application US/09672126B
; Patent No. 6949520
; GENERAL INFORMATION:
; APPLICANT: Hartmann, Gunther
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Kriegl, Arthur
; TITLE OF INVENTION: Methods Related to Immunostimulatory
; TITLE OF INVENTION: Nucleic Acid-Induced Interferon
; FILE REFERENCE: C1039/7044
; CURRENT APPLICATION NUMBER: US/09/672,126B
; CURRENT FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/156,147
; PRIOR FILING DATE: 1999-09-29
; NUMBER OF SEQ ID NOS: 169
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 110
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
; US-09-672-126B-110

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGGTGGCCCAT 18

RESULT 34
US-09-634-320-8
; Sequence 8, Application US/09634320
; Patent No. 6822086
; GENERAL INFORMATION:
```

```
/ APPLICANT: Papisov, Mikhail, I.
/ TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF
/ FILE REFERENCE: 0838.1003-001
/ CURRENT APPLICATION NUMBER: US/09/634,320
/ PRIOR FILING DATE: 2000-08-09
/ PRIOR APPLICATION NUMBER: US 60/147,919
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 8
/ LENGTH: 19
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Oligonucleotide
/ OTHER INFORMATION: c indicates an RNA base
US-09-634-320-8
```

```
Query Match          100.0%; Score 18; DB 3; Length 19;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCCAT 18
```

```
RESULT 35
US-09-634-320-9/c
/ Sequence 9, Application US/09634320
/ Patent No. 6822086
/ GENERAL INFORMATION:
/ APPLICANT: Papisov, Mikhail, I.
/ TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF
/ FILE REFERENCE: 0838.1003-001
/ CURRENT APPLICATION NUMBER: US/09/634,320
/ PRIOR FILING DATE: 2000-08-09
/ PRIOR APPLICATION NUMBER: US 60/147,919
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 9
/ LENGTH: 19
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Oligonucleotide
/ OTHER INFORMATION: c indicates an RNA base
US-09-634-320-9
```

```
Query Match          100.0%; Score 18; DB 3; Length 19;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCCAT 1
```

```
RESULT 36
US-09-082-649B-60
/ Sequence 60, Application US/09082649B
/ Patent No. 6339068
/ GENERAL INFORMATION:
/ APPLICANT: Davis, Heather L.
/ APPLICANT: Kries, Arthur M.
/ APPLICANT: Schorr, Joachim
/ APPLICANT: Wu, Tong
/ TITLE OF INVENTION: Vectors and Methods for Immunization or
/ TITLE OF INVENTION: Therapeutic Protocols
/ FILE REFERENCE: C1039/7009
```

```
/ CURRENT APPLICATION NUMBER: US/09/082,649B
/ CURRENT FILING DATE: 1998-05-20
/ PRIOR APPLICATION NUMBER: US 60/047,233
/ PRIOR FILING DATE: 1997-05-20
/ PRIOR APPLICATION NUMBER: US 60/047,209
/ PRIOR FILING DATE: 1997-05-20
/ NUMBER OF SEQ ID NOS: 85
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 60
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: synthetic oligonucleotide
US-09-082-649B-60
```

```
Query Match          100.0%; Score 18; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCCAT 18
```

```
RESULT 37
US-09-965-101-60
/ Sequence 60, Application US/09965101
/ Patent No. 6821957
/ GENERAL INFORMATION:
/ APPLICANT: Davis, Heather L.
/ APPLICANT: Kries, Arthur M.
/ APPLICANT: Schorr, Joachim
/ APPLICANT: Wu, Tong
/ TITLE OF INVENTION: Vectors and Methods for Immunization or
/ TITLE OF INVENTION: Therapeutic Protocols
/ FILE REFERENCE: C1039/7057 (HCL/MAT)
/ CURRENT APPLICATION NUMBER: US/09/965,101
/ PRIOR FILING DATE: 2001-09-26
/ PRIOR APPLICATION NUMBER: US 09/082,649
/ PRIOR FILING DATE: 1998-05-20
/ PRIOR APPLICATION NUMBER: US 60/047,233
/ PRIOR FILING DATE: 1997-05-20
/ PRIOR APPLICATION NUMBER: US 60/047,209
/ PRIOR FILING DATE: 1997-05-20
/ NUMBER OF SEQ ID NOS: 84
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 60
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: synthetic oligonucleotide
US-09-965-101-60
```

```
Query Match          100.0%; Score 18; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCCAT 18
```

```
RESULT 38
US-09-634-320-1
/ Sequence 1, Application US/09634320
/ Patent No. 6822086
/ GENERAL INFORMATION:
/ APPLICANT: Papisov, Mikhail, I.
/ TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF
/ TITLE OF INVENTION: USE THEREOF
/ FILE REFERENCE: 0838.1003-001
```



;; CURRENT APPLICATION NUMBER: US/09/634,320  
;; CURRENT FILING DATE: 2000-08-09  
;; PRIOR APPLICATION NUMBER: US 60/147,919  
;; PRIOR FILING DATE: 1999-08-09  
;; NUMBER OF SEQ ID NOS: 13  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 1  
;; LENGTH: 23  
;; TYPE: DNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Synthetic Oligonucleotide  
US-09-634-320-1

Query Match 100.0%; Score 18; DB 3; Length 23;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
Db 4 TCTCCAGCGTGGCCCAT 21

RESULT 39  
US-09-634-320-2/c  
;; Sequence 2, Application US/09634320  
;; Patent No. 6822086  
;; GENERAL INFORMATION:  
;; APPLICANT: Papisov, Mikhail, I.  
;; TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF  
;; TITLE OF INVENTION: USE THEREOF  
;; FILE REFERENCE: 0838.1003-001  
;; CURRENT APPLICATION NUMBER: US/09/634,320  
;; CURRENT FILING DATE: 2000-08-09  
;; PRIOR APPLICATION NUMBER: US 60/147,919  
;; PRIOR FILING DATE: 1999-08-09  
;; NUMBER OF SEQ ID NOS: 13  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 2  
;; LENGTH: 23  
;; TYPE: DNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Synthetic Oligonucleotide  
;; OTHER INFORMATION: C = amino modified T  
US-09-634-320-2

Query Match 100.0%; Score 18; DB 3; Length 23;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
Db 20 TCTCCAGCGTGGCCCAT 3

RESULT 40  
US-08-410-804-13/c  
;; Sequence 13, Application US/08410804  
;; Patent No. 5632994  
;; GENERAL INFORMATION:  
;; APPLICANT: Reed, John C.  
;; APPLICANT: Sato, Takaki  
;; TITLE OF INVENTION: FAS ASSOCIATED PROTEINS  
;; NUMBER OF SEQUENCES: 22  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Cathryn Campbell  
;; STREET: 4370 La Jolla Village Drive, Ste 700  
;; CITY: San Diego  
;; STATE: California  
;; COUNTRY: United States  
;; ZIP: 92122  
;; COMPUTER READABLE FORM:

;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patentin Release #1.0, Version #1.25  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/410,804  
;; FILING DATE: 27-MAR-1995  
;; CLASSIFICATION: 435  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/259,514  
;; FILING DATE: 14-JUN-1994  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Campbell, Cathryn  
;; REGISTRATION NUMBER: 31,815  
;; REFERENCE/DOCKET NUMBER: P-LJ 1389  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (619) 535-9001  
;; TELEFAX: (619) 535-8949  
;; INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-410-804-13

Query Match 100.0%; Score 18; DB 2; Length 27;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
Db 25 TCTCCAGCGTGGCCCAT 8

RESULT 41  
US-08-607-269-8/c  
;; Sequence 8, Application US/08607269  
;; Patent No. 5702897  
;; GENERAL INFORMATION:  
;; APPLICANT: Reed, John C.  
;; APPLICANT: Sato, Takaki  
;; TITLE OF INVENTION: Interaction of Proteins Involved in a  
;; TITLE OF INVENTION: Cell Death Pathway  
;; NUMBER OF SEQUENCES: 29  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Campbell and Flores  
;; STREET: 4370 La Jolla Village Drive, Suite 700  
;; CITY: San Diego  
;; STATE: California  
;; COUNTRY: USA  
;; ZIP: 92122  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patentin Release #1.0, Version #1.25  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/607,269  
;; FILING DATE:  
;; CLASSIFICATION: 435  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/226,876  
;; FILING DATE: 13-APR-1994  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Campbell, Cathryn A.  
;; REGISTRATION NUMBER: 31,815  
;; REFERENCE/DOCKET NUMBER: P-LJ 9882  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (619) 535-9001  
;; TELEFAX: (619) 535-8949  
;; INFORMATION FOR SEQ ID NO: 8:

SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-607-269-8

Query Match 100.0%; Score 18; DB 2; Length 27;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
|||||  
DB 25 TCTCCAGCGTGGCCCAT 8

RESULT 42  
US-08-259-514-13/c  
Sequence 13, Application US/08259514  
Patent No. 5747245  
GENERAL INFORMATION:  
APPLICANT: Reed, John C.  
TITLE OF INVENTION: FAS ASSOCIATED PROTEINS  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Cathryn Campbell  
STREET: 4370 La Jolla Village Drive, Ste 700  
CITY: San Diego  
STATE: California  
COUNTRY: United States  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/259,514  
FILING DATE: 14-JUN-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Campbell, Cathryn  
REGISTRATION NUMBER: 31,815  
REFERENCE/DOCKET NUMBER: P-LJ 9954  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-259-514-13

Query Match 100.0%; Score 18; DB 2; Length 27;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
|||||  
DB 25 TCTCCAGCGTGGCCCAT 8

RESULT 43  
US-08-858-311-13/c  
Sequence 13, Application US/08858311  
Patent No. 5876939  
GENERAL INFORMATION:  
APPLICANT: Reed, John C.  
APPLICANT: Sato, Takaaki

TITLE OF INVENTION: FAS ASSOCIATED PROTEINS  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Cathryn Campbell  
STREET: 4370 La Jolla Village Drive, Ste 700  
CITY: San Diego  
STATE: California  
COUNTRY: United States  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/858,311  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/410,804  
FILING DATE: 27-MAR-1995  
APPLICATION NUMBER: US 08/259,514  
FILING DATE: 14-JUN-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Campbell, Cathryn  
REGISTRATION NUMBER: 31,815  
REFERENCE/DOCKET NUMBER: P-LJ 1389  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-858-311-13

Query Match 100.0%; Score 18; DB 2; Length 27;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
|||||  
DB 25 TCTCCAGCGTGGCCCAT 8

RESULT 44  
PCT-US95-04600-8/c  
Sequence 8, Application PC/TUS9504600  
GENERAL INFORMATION:  
APPLICANT: LA JOLLA CANCER RESEARCH FOUNDATION  
TITLE OF INVENTION: Interaction of Proteins Involved in  
NUMBER OF SEQUENCES: 29  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/04600  
FILING DATE: 12-APR-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:

NAME: Imbra, Richard J.  
REGISTRATION NUMBER: 37,643  
REFERENCE/DOCKET NUMBER: PP-LJ 1361  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
PCT-US95-04600-8

Query Match 100.0%; Score 18; DB 6; Length 27;  
Best Local Similarity 100.0%; Pred. No. 10;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
DB 25 TCTCCAGCGTGGCCCAT 8

RESULT 45  
US-08-217-082A-9  
Sequence 9, Application US/08217082A  
Patent No. 5734033

GENERAL INFORMATION:  
APPLICANT: Reed, John  
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES FOR INHIBITING THE  
TITLE OF INVENTION: GROWTH OF CELLS EXPRESSING THE HUMAN BCL-2 GENE  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
STREET: 224 Airport Parkway  
CITY: San Jose  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 95110

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/217,082A  
FILING DATE: 24-MAR-1994  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/840,716  
FILING DATE: 21-FEB-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/288,692  
FILING DATE: 22-DEC-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Fortney, Andrew D.

REGISTRATION NUMBER: 34,600  
REFERENCE/DOCKET NUMBER: 3335-067-55 FWC  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (408) 436-2070  
TELEFAX: (408) 436-2075  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid  
DESCRIPTION: Synthetic DNA  
ANTI-SENSE: YES  
US-08-217-082A-9

Query Match 94.4%; Score 17; DB 2; Length 17;  
Best Local Similarity 100.0%; Pred. No. 31;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 CTCCAGCGTGGCCCAT 18  
DB 1 CTCCAGCGTGGCCCAT 17

RESULT 46  
US-09-030-701-41  
Sequence 41, Application US/09030701B  
Patent No. 6214806

GENERAL INFORMATION:  
APPLICANT: Krieg, Arthur M.  
APPLICANT: Schwartz, David A.  
TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING  
TITLE OF INVENTION: UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF  
FILE REFERENCE: C1039/7011  
CURRENT APPLICATION NUMBER: US/09/030,701B  
CURRENT FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/039,405  
PRIOR FILING DATE: 1997-02-28  
NUMBER OF SEQ ID NOS: 65  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 41  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: synthetic oligonucleotide  
US-09-030-701-41

Query Match 91.1%; Score 16.4; DB 3; Length 18;  
Best Local Similarity 94.4%; Pred. No. 62;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 1 TCTCCAGCGTGGCCCAT 18

RESULT 47  
US-09-030-701-60  
Sequence 60, Application US/09030701B  
Patent No. 6214806

GENERAL INFORMATION:  
APPLICANT: Krieg, Arthur M.  
APPLICANT: Schwartz, David A.  
TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING  
TITLE OF INVENTION: UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF  
FILE REFERENCE: C1039/7011  
CURRENT APPLICATION NUMBER: US/09/030,701B  
CURRENT FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/039,405  
PRIOR FILING DATE: 1997-02-28  
NUMBER OF SEQ ID NOS: 65  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 60  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: synthetic oligonucleotide  
US-09-030-701-60

Query Match 91.1%; Score 16.4; DB 3; Length 18;  
Best Local Similarity 94.4%; Pred. No. 62;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18

Db 1 TCTCCAGCGCGCCAT 18  
RESULT 48  
US-09-286-098-72  
; Sequence 72, Application US/09286098  
; Patent No. 6218371  
; GENERAL INFORMATION:  
; APPLICANT: Krieger, Arthur M.  
; APPLICANT: Weiner, George  
; TITLE OF INVENTION: Methods and Products for Stimulating the  
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and  
; FILE REFERENCE: C1039/7026/HCL  
; CURRENT APPLICATION NUMBER: US/09/286,098  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,729  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 105  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 72  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Sequence  
US-09-286-098-72  
Query Match 91.1%; Score 16.4; DB 3; Length 18;  
Best Local Similarity 94.4%; Pred. No. 62;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGCGCCAT 18  
Db 1 TCTCCAGCGCGCCAT 18  
RESULT 49  
US-08-960-774-72  
; Sequence 72, Application US/08960774  
; Patent No. 6239116  
; GENERAL INFORMATION:  
; APPLICANT: Krieger et al.  
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES  
; NUMBER OF SEQUENCES: 111  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 4225 Executive Square, Suite 1400  
; CITY: La Jolla  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 92037  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: ASCII text  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/960,774  
; FILING DATE: 30-October-1997  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652  
; FILING DATE: October 30, 1996  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Halle, Lisa A.  
; REGISTRATION NUMBER: 38,347  
; REFERENCE/DOCKET NUMBER: 08918/012001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 619/678-5070  
; TELEFAX: 619/678-5099

; INFORMATION FOR SEQ ID NO: 72:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
US-08-960-774-72  
Query Match 91.1%; Score 16.4; DB 3; Length 18;  
Best Local Similarity 94.4%; Pred. No. 62;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGCGCCAT 18  
Db 1 TCTCCAGCGCGCCAT 18  
RESULT 50  
US-09-191-170-66  
; Sequence 66, Application US/09191170  
; Patent No. 6429199  
; GENERAL INFORMATION:  
; APPLICANT: Krieger, Arthur M.  
; APPLICANT: Hartmann, Gunther  
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
; FILE REFERENCE: C1039/7017  
; CURRENT APPLICATION NUMBER: US/09/191,170  
; CURRENT FILING DATE: 1998-11-13  
; EARLIER APPLICATION NUMBER: US 08/960,774  
; EARLIER FILING DATE: 1997-10-30  
; EARLIER APPLICATION NUMBER: US 08/738,652  
; EARLIER FILING DATE: 1996-10-30  
; EARLIER APPLICATION NUMBER: US 08/386,063  
; EARLIER FILING DATE: 1995-02-07  
; EARLIER APPLICATION NUMBER: US 08/276,358  
; EARLIER FILING DATE: 1994-07-15  
; NUMBER OF SEQ ID NOS: 99  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 66  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: synthetic oligonucleotide  
US-09-191-170-66  
Query Match 91.1%; Score 16.4; DB 3; Length 18;  
Best Local Similarity 94.4%; Pred. No. 62;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGCGCCAT 18  
Db 1 TCTCCAGCGCGCCAT 18  
Search completed: February 17, 2006, 20:01:19  
Job time : 148 secs

GenCore version 5.1.7  
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OM nucleic - nucleic search, using sw model

Run on: February 17, 2006, 19:59:54 ; Search time 803 Seconds  
(without alignments)  
185.366 Million cell updates/sec

Title: US-10-822-205-1

Perfect score: 18

Sequence: 1 tctccagcgctgcgcacat 18

Scoring table: IDENTITY\_NUC

Searched: 9793542 seqs, 413468905 residues

Total number of hits satisfying chosen parameters: 10535742

Minimum DB seq length: 0  
Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : Published Applications NA Main:\*

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- 2: /cgn2\_6/prodata/1/pubpna/us08\_PUBCOMB.seq:\*
- 3: /cgn2\_6/prodata/1/pubpna/us09\_PUBCOMB.seq:\*
- 4: /cgn2\_6/prodata/1/pubpna/us10\_PUBCOMB.seq:\*
- 5: /cgn2\_6/prodata/1/pubpna/us10A\_PUBCOMB.seq:\*
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- 8: /cgn2\_6/prodata/1/pubpna/us10D\_PUBCOMB.seq:\*
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- 10: /cgn2\_6/prodata/1/pubpna/us11\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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6	18	100.0	18	3	US-09-965-116A-98
7	18	100.0	18	3	US-09-865-116A-99
8	18	100.0	18	3	US-09-800-266A-51
9	18	100.0	18	3	US-09-895-007A-51
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15	18	100.0	18	3	US-09-931-732-20
16	18	100.0	18	3	US-09-818-918-55
17	18	100.0	18	3	US-09-776-479-1
18	18	100.0	18	3	US-09-776-479-54
19	18	100.0	18	3	US-09-776-479-55
20	18	100.0	18	3	US-09-776-479-91
21	18	100.0	18	3	US-09-954-987B-115
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23	18	100.0	18	3	US-09-967-464-4

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30	18	100.0	18	5	US-10-112-653-85	Sequence 85, Appl1
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34	18	100.0	18	5	US-10-017-995-91	Sequence 91, Appl1
35	18	100.0	18	5	US-10-002-884A-6	Sequence 6, Appl1
36	18	100.0	18	5	US-10-300-247-51	Sequence 51, Appl1
37	18	100.0	18	5	US-10-161-229-53	Sequence 53, Appl1
38	18	100.0	18	5	US-10-142-566-45	Sequence 45, Appl1
39	18	100.0	18	6	US-10-290-545-9	Sequence 9, Appl1
40	18	100.0	18	6	US-10-290-545-24	Sequence 24, Appl1
41	18	100.0	18	6	US-10-262-318-6	Sequence 6, Appl1
42	18	100.0	18	6	US-10-224-523-40	Sequence 40, Appl1
43	18	100.0	18	6	US-10-379-164-2	Sequence 2, Appl1
44	18	100.0	18	6	US-10-187-264A-45	Sequence 45, Appl1
45	18	100.0	18	6	US-10-265-072-112	Sequence 112, App
46	18	100.0	18	6	US-10-365-623-15	Sequence 15, Appl1
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48	18	100.0	18	6	US-10-053-645A-17	Sequence 17, Appl1
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50	18	100.0	18	6	US-10-140-013-1	Sequence 1, Appl1
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53	18	100.0	18	6	US-10-233-902-6	Sequence 6, Appl1
54	18	100.0	18	6	US-10-314-578-1	Sequence 1, Appl1
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57	18	100.0	18	6	US-10-314-578-91	Sequence 91, Appl1
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60	18	100.0	18	6	US-10-437-263-24	Sequence 24, Appl1
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63	18	100.0	18	6	US-10-447-136-218	Sequence 218, App
64	18	100.0	18	6	US-10-437-258-9	Sequence 9, Appl1
65	18	100.0	18	6	US-10-437-258-24	Sequence 24, Appl1
66	18	100.0	18	7	US-10-373-381-46	Sequence 46, Appl1
67	18	100.0	18	7	US-10-333-448-2	Sequence 2, Appl1
68	18	100.0	18	7	US-10-719-493-45	Sequence 45, Appl1
69	18	100.0	18	7	US-10-627-331-45	Sequence 45, Appl1
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73	18	100.0	18	7	US-10-769-282-55	Sequence 55, Appl1
74	18	100.0	18	7	US-10-735-592-60	Sequence 60, Appl1
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79	18	100.0	18	8	US-10-822-205-1	Sequence 1, Appl1
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81	18	100.0	18	8	US-10-831-778-54	Sequence 54, Appl1
82	18	100.0	18	8	US-10-831-778-55	Sequence 55, Appl1
83	18	100.0	18	8	US-10-831-778-91	Sequence 91, Appl1
84	18	100.0	18	8	US-10-876-892-46	Sequence 46, Appl1
85	18	100.0	18	8	US-10-876-965-46	Sequence 46, Appl1
86	18	100.0	18	8	US-10-863-995-21	Sequence 21, Appl1
87	18	100.0	18	8	US-10-694-075-77	Sequence 77, Appl1
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92	18	100.0	18	8	US-10-694-383-99	Sequence 99, Appl1
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94	18	100.0	18	8	US-10-694-383-99	Sequence 99, Appl1
95	18	100.0	18	8	US-10-888-886-51	Sequence 51, Appl1
96	18	100.0	18	8	US-10-789-758-2	Sequence 2, Appl1

97	18	100.0	8	US-10-847-642-55	Sequence 55, Appl	170	16.4	91.1	18	3	US-09-776-479-78	Sequence 78, Appl
98	18	100.0	8	US-10-925-734-14	Sequence 21, Appl	171	16.4	91.1	18	3	US-09-776-479-79	Sequence 79, Appl
99	18	100.0	8	US-10-858-658-21	Sequence 2, Appl	172	16.4	91.1	18	3	US-09-776-479-80	Sequence 406, App
100	18	100.0	8	US-10-478-188-2	Sequence 77, Appl	173	16.4	91.1	18	5	US-10-113-653-72	Sequence 72, Appl
101	18	100.0	8	US-10-694-418-7	Sequence 7, Appl	174	16.4	91.1	18	5	US-10-113-653-73	Sequence 73, Appl
102	18	100.0	8	US-10-694-418-77	Sequence 98, Appl	175	16.4	91.1	18	5	US-10-112-653-33	Sequence 393, App
103	18	100.0	8	US-10-694-418-98	Sequence 99, Appl	176	16.4	91.1	18	5	US-10-017-995-78	Sequence 78, Appl
104	18	100.0	8	US-10-694-418-99	Sequence 25, Appl	177	16.4	91.1	18	5	US-10-017-995-79	Sequence 79, Appl
105	18	100.0	8	US-10-899-771-25	Sequence 55, Appl	178	16.4	91.1	18	5	US-10-161-229-66	Sequence 406, App
106	18	100.0	8	US-10-888-785-55	Sequence 51, Appl	179	16.4	91.1	18	5	US-10-161-229-66	Sequence 66, App
107	18	100.0	8	US-10-831-775-51	Sequence 55, Appl	180	16.4	91.1	18	6	US-10-187-264A-72	Sequence 72, Appl
108	18	100.0	8	US-10-888-449-55	Sequence 51, Appl	181	16.4	91.1	18	6	US-10-265-072-110	Sequence 110, App
109	18	100.0	8	US-10-894-862-51	Sequence 55, Appl	182	16.4	91.1	18	6	US-10-306-522-72	Sequence 72, Appl
110	18	100.0	8	US-10-894-657-51	Sequence 55, Appl	183	16.4	91.1	18	6	US-10-314-578-78	Sequence 78, Appl
111	18	100.0	8	US-10-884-852-55	Sequence 55, Appl	184	16.4	91.1	18	6	US-10-314-578-79	Sequence 79, Appl
112	18	100.0	8	US-10-613-916-55	Sequence 45, Appl	185	16.4	91.1	18	7	US-10-373-381-60	Sequence 406, App
113	18	100.0	8	US-10-627-413-45	Sequence 55, Appl	186	16.4	91.1	18	7	US-10-399-356-2	Sequence 2, Appl
114	18	100.0	8	US-10-921-086-45	Sequence 55, Appl	187	16.4	91.1	18	7	US-10-719-493-72	Sequence 72, Appl
115	18	100.0	8	US-10-928-762-55	Sequence 55, Appl	188	16.4	91.1	18	7	US-10-627-331-72	Sequence 72, Appl
116	18	100.0	8	US-10-987-146-55	Sequence 55, Appl	189	16.4	91.1	18	7	US-10-735-593-53	Sequence 53, Appl
117	18	100.0	8	US-10-961-458-17	Sequence 17, Appl	190	16.4	91.1	18	8	US-10-877-369-60	Sequence 60, App
118	18	100.0	8	US-10-961-458-24	Sequence 24, Appl	191	16.4	91.1	18	8	US-10-822-205-2	Sequence 2, Appl
119	18	100.0	8	US-10-963-999-10	Sequence 10, Appl	192	16.4	91.1	18	8	US-10-831-778-78	Sequence 78, Appl
120	18	100.0	8	US-10-963-999-25	Sequence 25, Appl	193	16.4	91.1	18	8	US-10-831-778-79	Sequence 79, Appl
121	18	100.0	8	US-10-972-301-51	Sequence 51, Appl	194	16.4	91.1	18	8	US-10-831-778-79	Sequence 406, App
122	18	100.0	8	US-10-831-647-55	Sequence 55, Appl	195	16.4	91.1	18	8	US-10-876-892-60	Sequence 60, App
123	18	100.0	8	US-10-956-494-55	Sequence 51, Appl	196	16.4	91.1	18	8	US-10-876-965-60	Sequence 68, Appl
124	18	100.0	8	US-10-922-002-51	Sequence 55, Appl	197	16.4	91.1	18	8	US-10-649-584-68	Sequence 72, Appl
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127	18	100.0	8	US-11-036-527-55	Sequence 55, Appl	200	16.4	91.1	18	10	US-11-084-777-113	Sequence 72, Appl
128	18	100.0	8	US-11-084-777-115	Sequence 45, Appl	201	16.4	91.1	18	10	US-11-071-836-72	Sequence 72, Appl
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130	18	100.0	8	US-11-041-636-6	Sequence 2, Appl	203	16.4	91.1	18	10	US-11-021-729-26	Sequence 27, Appl
131	18	100.0	8	US-11-017-103-2	Sequence 59, Appl	204	16.4	91.1	18	10	US-11-021-729-27	Sequence 28, Appl
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134	18	100.0	8	US-11-021-729-1	Sequence 2, Appl	207	16.4	91.1	18	10	US-11-021-729-55	Sequence 55, Appl
135	18	100.0	8	US-11-021-729-2	Sequence 3, Appl	208	16.4	91.1	18	10	US-09-781-980-1	Sequence 1, Appl
136	18	100.0	8	US-11-021-729-3	Sequence 4, Appl	209	16.4	91.1	20	3	US-09-781-980-3	Sequence 78, App
137	18	100.0	8	US-11-021-729-4	Sequence 5, Appl	210	16.4	91.1	20	3	US-09-888-326-758	Sequence 76, App
138	18	100.0	8	US-11-021-729-5	Sequence 6, Appl	211	16.4	91.1	20	3	US-09-888-326-766	Sequence 767, App
139	18	100.0	8	US-11-021-729-6	Sequence 7, Appl	212	16.4	91.1	20	3	US-09-932-300-72	Sequence 72, Appl
140	18	100.0	8	US-11-021-729-7	Sequence 56, Appl	213	16.4	91.1	20	3	US-09-776-479-109	Sequence 109, App
141	18	100.0	8	US-11-021-729-56	Sequence 59, Appl	214	16.4	91.1	20	3	US-09-776-479-111	Sequence 111, App
142	18	100.0	8	US-11-021-729-59	Sequence 65, Appl	215	16.4	91.1	20	3	US-09-776-479-112	Sequence 112, App
143	18	100.0	8	US-11-021-729-65	Sequence 757, App	216	16.4	91.1	20	3	US-09-776-479-113	Sequence 109, App
144	18	100.0	20	US-09-888-326-757	Sequence 87, Appl	217	16.4	91.1	20	3	US-09-776-479-111	Sequence 112, App
145	18	100.0	20	US-09-776-479-87	Sequence 60, Appl	218	16.4	91.1	20	3	US-09-776-479-111	Sequence 109, App
146	18	100.0	20	US-09-965-101-60	Sequence 81, Appl	219	16.4	91.1	20	3	US-09-776-479-112	Sequence 102, App
147	18	100.0	20	US-10-112-653-81	Sequence 87, Appl	220	16.4	91.1	20	5	US-10-112-653-102	Sequence 104, App
148	18	100.0	20	US-10-017-995-87	Sequence 87, Appl	221	16.4	91.1	20	5	US-10-112-653-104	Sequence 105, App
149	18	100.0	20	US-10-314-578-87	Sequence 87, Appl	222	16.4	91.1	20	5	US-10-017-995-109	Sequence 109, App
150	18	100.0	20	US-10-831-778-87	Sequence 60, Appl	223	16.4	91.1	20	5	US-10-017-995-111	Sequence 111, App
151	18	100.0	20	US-10-838-659-60	Sequence 42, Appl	224	16.4	91.1	20	5	US-10-017-995-112	Sequence 109, App
152	18	100.0	23	US-10-053-645A-42	Sequence 41, Appl	225	16.4	91.1	20	5	US-10-314-578-109	Sequence 112, App
153	18	100.0	29	US-09-817-387-12	Sequence 43, Appl	226	16.4	91.1	20	6	US-10-314-578-111	Sequence 111, App
154	18	100.0	17	US-11-021-729-41	Sequence 42, Appl	227	16.4	91.1	20	6	US-10-314-578-111	Sequence 109, App
155	17	94.4	17	US-11-021-729-42	Sequence 43, Appl	228	16.4	91.1	20	6	US-10-314-578-112	Sequence 112, App
156	17	94.4	17	US-11-021-729-43	Sequence 44, Appl	229	16.4	91.1	20	6	US-10-831-778-109	Sequence 109, App
157	17	94.4	17	US-11-021-729-44	Sequence 45, Appl	230	16.4	91.1	20	8	US-10-831-778-111	Sequence 112, App
158	17	94.4	17	US-11-021-729-45	Sequence 46, Appl	231	16.4	91.1	20	8	US-10-831-778-112	Sequence 8, Appl
159	17	94.4	17	US-11-021-729-46	Sequence 72, Appl	232	16.4	91.1	16	10	US-11-021-729-8	Sequence 9, Appl
160	16.4	91.1	18	US-09-824-468-72	Sequence 750, App	233	16.4	88.9	16	10	US-11-021-729-9	Sequence 10, Appl
161	16.4	91.1	18	US-09-888-326-750	Sequence 751, App	234	16.4	88.9	16	10	US-11-021-729-10	Sequence 11, Appl
162	16.4	91.1	18	US-09-888-326-751	Sequence 753, App	235	16.4	88.9	16	10	US-11-021-729-11	Sequence 12, Appl
163	16.4	91.1	18	US-09-931-583-69	Sequence 63, App	236	16.4	88.9	16	10	US-11-021-729-12	Sequence 13, Appl
164	16.4	91.1	18	US-09-776-479-78	Sequence 79, Appl	237	16.4	88.9	16	10	US-11-021-729-13	Sequence 14, Appl
165	16.4	91.1	18	US-09-776-479-79	Sequence 406, App	238	16.4	88.9	16	10	US-11-021-729-14	Sequence 47, Appl
166	16.4	91.1	18	US-09-776-479-80	Sequence 113, App	239	16.4	88.9	16	10	US-11-021-729-48	Sequence 48, Appl
167	16.4	91.1	18	US-09-954-987B-113		240	16.4	88.9	16	10		
168	16.4	91.1	18			241	16.4	88.9	16	10		
169	16.4	91.1	18			242	16.4	88.9	16	10		

243	16	88.9	16	10	US-11-021-729-49	Sequence 49, Appl	316	14	77.8	22	5	US-10-017-995-76	Sequence 76, Appl
244	16	88.9	16	10	US-11-021-729-50	Sequence 50, Appl	317	14	77.8	22	6	US-10-314-578-76	Sequence 76, Appl
245	16	88.9	16	10	US-11-021-729-51	Sequence 51, Appl	318	14	77.8	22	8	US-10-831-778-76	Sequence 76, Appl
246	16	88.9	16	10	US-11-021-729-52	Sequence 52, Appl	319	14	77.8	23	9	US-10-941-652A-138	Sequence 138, App
247	16	88.9	18	8	US-10-822-205-4	Sequence 4, Appl1	320	14	77.8	24	3	US-09-888-326-440	Sequence 440, App
248	16	88.9	19	9	US-10-923-516-82	Sequence 82, Appl	321	14	77.8	24	3	US-09-776-479-81	Sequence 81, Appl
249	16	88.9	19	9	US-10-923-516-82	Sequence 82, Appl	322	14	77.8	24	3	US-09-776-479-81	Sequence 81, Appl
250	15	83.3	15	10	US-11-021-729-35	Sequence 35, Appl	323	14	77.8	24	5	US-10-112-653-75	Sequence 75, Appl
251	15	83.3	15	10	US-11-021-729-38	Sequence 38, Appl	324	14	77.8	24	5	US-10-017-995-81	Sequence 81, Appl
252	15	83.3	15	10	US-11-021-729-38	Sequence 38, Appl	325	14	77.8	24	6	US-10-314-578-81	Sequence 81, Appl
253	15	83.3	23	9	US-10-941-652A-276	Sequence 276, Appl	326	14	77.8	24	8	US-10-831-778-81	Sequence 81, Appl
254	14.8	82.2	18	3	US-09-944-326-13	Sequence 13, Appl	327	13.8	76.7	25	8	US-10-719-900-159141	Sequence 159141, Sequence 427528, Sequence 622869, Sequence 32, Appl
255	14.8	82.2	18	3	US-09-888-326-764	Sequence 764, App	328	13.8	76.7	25	10	US-11-036-317-47528	Sequence 71, Appl
256	14.8	82.2	18	3	US-09-888-326-765	Sequence 765, App	329	13.4	74.4	17	3	US-09-800-266A-61	Sequence 61, Appl
257	14.8	82.2	18	3	US-09-776-479-408	Sequence 408, App	330	13.4	74.4	17	3	US-09-895-007A-61	Sequence 61, Appl
258	14.8	82.2	18	3	US-09-776-479-408	Sequence 408, App	331	13.4	74.4	17	3	US-09-920-313-61	Sequence 61, Appl
259	14.8	82.2	18	3	US-09-967-726A-13	Sequence 13, Appl	332	13.4	74.4	17	3	US-09-824-468-71	Sequence 71, Appl
260	14.8	82.2	18	3	US-09-776-479-408	Sequence 408, App	333	13.4	74.4	17	3	US-09-800-266A-61	Sequence 61, Appl
261	14.8	82.2	18	3	US-09-776-479-409	Sequence 409, App	334	13.4	74.4	17	3	US-09-895-007A-61	Sequence 61, Appl
262	14.8	82.2	18	5	US-10-112-653-395	Sequence 395, App	335	13.4	74.4	17	3	US-09-920-313-61	Sequence 61, Appl
263	14.8	82.2	18	5	US-10-112-653-395	Sequence 395, App	336	13.4	74.4	17	3	US-09-888-326-752	Sequence 752, App
264	14.8	82.2	18	5	US-10-017-995-408	Sequence 408, App	337	13.4	74.4	17	3	US-09-776-479-77	Sequence 77, Appl
265	14.8	82.2	18	5	US-10-017-995-409	Sequence 409, App	338	13.4	74.4	17	3	US-09-954-987B-114	Sequence 114, App
266	14.8	82.2	18	6	US-10-080-794-13	Sequence 13, Appl	339	13.4	74.4	17	3	US-09-776-479-77	Sequence 77, Appl
267	14.8	82.2	18	6	US-10-314-578-408	Sequence 408, App	340	13.4	74.4	17	5	US-10-023-909A-61	Sequence 61, Appl
268	14.8	82.2	18	6	US-10-314-578-409	Sequence 409, App	341	13.4	74.4	17	5	US-10-112-653-71	Sequence 71, Appl
269	14.8	82.2	18	8	US-10-828-394-14	Sequence 14, Appl	342	13.4	74.4	17	5	US-10-017-995-77	Sequence 77, Appl
270	14.8	82.2	18	8	US-10-828-395-14	Sequence 14, Appl	343	13.4	74.4	17	5	US-10-300-247-61	Sequence 61, Appl
271	14.8	82.2	18	8	US-10-831-778-408	Sequence 408, App	344	13.4	74.4	17	5	US-10-161-229-65	Sequence 65, Appl
272	14.8	82.2	18	8	US-10-831-778-409	Sequence 409, App	345	13.4	74.4	17	6	US-10-187-264A-71	Sequence 71, Appl
273	14.8	82.2	18	10	US-11-021-729-57	Sequence 57, Appl	346	13.4	74.4	17	6	US-10-265-072-111	Sequence 111, App
274	14.8	82.2	20	3	US-09-888-326-760	Sequence 760, App	347	13.4	74.4	17	6	US-10-306-522-71	Sequence 71, Appl
275	14.8	82.2	20	3	US-09-776-479-108	Sequence 108, App	348	13.4	74.4	17	6	US-10-434-696-61	Sequence 61, Appl
276	14.8	82.2	20	3	US-09-776-479-108	Sequence 108, App	349	13.4	74.4	17	6	US-10-373-381-59	Sequence 59, Appl
277	14.8	82.2	20	5	US-10-112-653-101	Sequence 101, App	350	13.4	74.4	17	7	US-10-719-493-71	Sequence 71, Appl
278	14.8	82.2	20	5	US-10-017-995-108	Sequence 108, App	351	13.4	74.4	17	7	US-10-627-331-71	Sequence 71, Appl
279	14.8	82.2	20	6	US-10-314-578-108	Sequence 108, App	352	13.4	74.4	17	7	US-10-627-331-71	Sequence 71, Appl
280	14.8	82.2	20	8	US-10-831-778-108	Sequence 108, App	353	13.4	74.4	17	7	US-10-666-733-61	Sequence 61, Appl
281	14.8	82.2	25	7	US-10-719-955-368311	Sequence 368311, Sequence 630772,	354	13.4	74.4	17	7	US-10-877-369-59	Sequence 59, Appl
282	14.8	82.2	25	10	US-11-036-317-630772	Sequence 630772,	355	13.4	74.4	17	8	US-10-816-220-61	Sequence 61, Appl
283	14.4	80.0	16	10	US-11-021-729-15	Sequence 15, Appl	356	13.4	74.4	17	8	US-10-831-778-77	Sequence 77, Appl
284	14.4	80.0	16	10	US-11-021-729-16	Sequence 16, Appl	357	13.4	74.4	17	8	US-10-876-892-59	Sequence 59, Appl
285	14.4	80.0	16	10	US-11-021-729-17	Sequence 17, Appl	358	13.4	74.4	17	8	US-10-876-895-59	Sequence 59, Appl
286	14.4	80.0	16	10	US-11-021-729-18	Sequence 18, Appl	359	13.4	74.4	17	8	US-10-888-886-61	Sequence 61, Appl
287	14.4	80.0	16	10	US-11-021-729-19	Sequence 19, Appl	360	13.4	74.4	17	8	US-10-831-775-61	Sequence 61, Appl
288	14.4	80.0	16	10	US-11-021-729-20	Sequence 20, Appl	361	13.4	74.4	17	9	US-10-627-413-71	Sequence 71, Appl
289	14.4	80.0	16	10	US-11-021-729-21	Sequence 21, Appl	362	13.4	74.4	17	9	US-10-921-086-71	Sequence 71, Appl
290	14.4	80.0	16	10	US-11-021-729-22	Sequence 22, Appl	363	13.4	74.4	17	9	US-10-492-002-61	Sequence 61, Appl
291	14.4	80.0	16	10	US-11-021-729-23	Sequence 23, Appl	364	13.4	74.4	17	10	US-11-056-463-109	Sequence 109, App
292	14.4	80.0	16	10	US-11-021-729-24	Sequence 24, Appl	365	13.4	74.4	17	10	US-11-084-777-114	Sequence 114, App
293	14.4	80.0	16	10	US-11-021-729-25	Sequence 25, Appl	366	13.4	74.4	17	10	US-11-071-836-71	Sequence 71, Appl
294	14.4	80.0	16	10	US-11-021-729-26	Sequence 26, Appl	367	13.4	74.4	17	10	US-11-110-189-71	Sequence 71, Appl
295	14.4	80.0	16	10	US-11-021-729-36	Sequence 36, Appl	368	13.4	74.4	20	6	US-10-422-466-51	Sequence 51, Appl
296	14.4	80.0	16	10	US-11-021-729-36	Sequence 36, Appl	369	13.4	74.4	25	8	US-10-719-900-511685	Sequence 511685, Sequence 149537, Sequence 496573,
297	14	77.8	14	10	US-11-021-729-39	Sequence 39, Appl	370	13.4	74.4	25	10	US-11-036-317-7143537	Sequence 143537, Sequence 496573,
298	14	77.8	16	3	US-09-888-326-533	Sequence 533, App	371	13.4	74.4	25	10	US-11-036-317-7143537	Sequence 496573,
299	14	77.8	16	3	US-09-776-479-90	Sequence 90, Appl	372	13.2	73.3	18	3	US-09-734-846-68	Sequence 68, Appl
300	14	77.8	16	3	US-09-776-479-90	Sequence 90, Appl	373	13.2	73.3	18	6	US-10-302-262-68	Sequence 68, Appl
301	14	77.8	16	5	US-10-112-653-84	Sequence 84, Appl	374	13.2	73.3	18	7	US-10-735-592-52	Sequence 52, Appl
302	14	77.8	16	5	US-10-017-995-90	Sequence 90, Appl	375	13.2	73.3	19	9	US-10-652-791-85	Sequence 85, Appl
303	14	77.8	16	6	US-10-314-578-90	Sequence 90, Appl	376	13.2	73.3	19	9	US-10-652-791-85	Sequence 85, Appl
304	14	77.8	16	8	US-10-831-778-90	Sequence 90, Appl	377	13.2	73.3	19	9	US-10-922-034-85	Sequence 85, Appl
305	14	77.8	18	3	US-09-888-326-761	Sequence 761, App	378	13.2	73.3	19	9	US-10-922-034-85	Sequence 85, Appl
306	14	77.8	18	3	US-09-776-479-407	Sequence 407, App	379	13.2	73.3	20	3	US-09-888-326-769	Sequence 769, App
307	14	77.8	18	5	US-09-776-479-407	Sequence 407, App	380	13.2	73.3	20	3	US-09-776-479-407	Sequence 407, App
308	14	77.8	18	5	US-10-112-653-394	Sequence 394, App	381	13.2	73.3	20	3	US-09-776-479-407	Sequence 407, App
309	14	77.8	18	6	US-10-017-995-407	Sequence 407, App	382	13.2	73.3	20	5	US-10-112-653-103	Sequence 103, App
310	14	77.8	18	6	US-10-314-578-407	Sequence 407, App	383	13.2	73.3	20	5	US-10-017-995-110	Sequence 110, App
311	14	77.8	18	8	US-10-831-778-407	Sequence 407, App	384	13.2	73.3	20	6	US-10-314-578-110	Sequence 110, App
312	14	77.8	22	3	US-09-888-326-759	Sequence 759, App	385	13.2	73.3	20	8	US-10-831-778-110	Sequence 110, App
313	14	77.8	22	3	US-09-776-479-76	Sequence 76, Appl	386	13.2	73.3	25	7	US-10-719-955-185672	Sequence 185672, Sequence 255807,
314	14	77.8	22	3	US-09-776-479-76	Sequence 76, Appl	387	13.2	73.3	25	7	US-10-719-955-185672	Sequence 255807,
315	14	77.8	22	5	US-10-112-653-70	Sequence 70, Appl	388	13.2	73.3	25	7	US-10-719-955-368310	Sequence 368310,

C 389	13.2	73.3	25	7	US-10-719-956-456746	Sequence 456746,
C 390	13.2	73.3	25	10	US-11-036-317-418653	Sequence 418653,
C 391	13.2	73.3	25	10	US-11-036-317-630773	Sequence 630773,
C 392	13	72.2	13	10	US-11-021-729-37	Sequence 37, Appl
C 393	13	72.2	13	10	US-11-021-729-40	Sequence 40, Appl
C 394	13	72.2	18	2	US-08-726-211-1	Sequence 1, Appl1
C 395	13	72.2	18	6	US-10-387-961A-1	Sequence 1, Appl1
C 396	13	72.2	20	6	US-10-053-645A-1	Sequence 7, Appl1
C 397	13	72.2	20	6	US-10-053-645A-7	Sequence 6, Appl1
C 398	13	72.2	20	8	US-10-822-205-6	Sequence 1, Appl1
C 399	13	72.2	20	8	US-10-822-205-6	Sequence 1, Appl1
C 400	13	72.2	20	9	US-10-961-458-1	Sequence 7, Appl1
C 401	13	72.2	21	9	US-10-961-458-7	Sequence 275, Appl
C 402	13	72.2	23	9	US-10-941-663A-275	Sequence 280, Appl
C 403	13	72.2	23	8	US-10-941-663A-280	Sequence 91312, A
C 404	12.8	71.1	21	3	US-09-864-636A-2320	Sequence 2320, Ap
C 405	12.8	71.1	21	3	US-09-864-426A-2320	Sequence 2320, Ap
C 406	12.8	71.1	21	6	US-10-084-839-2320	Sequence 2320, Ap
C 407	12.8	71.1	22	3	US-09-864-636A-2322	Sequence 2322, Ap
C 408	12.8	71.1	22	3	US-09-864-426A-2322	Sequence 2322, Ap
C 409	12.8	71.1	22	6	US-10-084-839-2332	Sequence 2332, Ap
C 410	12.8	71.1	25	7	US-10-719-956-20575	Sequence 20575, A
C 411	12.8	71.1	25	7	US-10-719-956-208506	Sequence 208506,
C 412	12.8	71.1	25	7	US-10-719-956-619927	Sequence 619927,
C 413	12.8	71.1	25	7	US-10-719-956-628935	Sequence 628935,
C 414	12.8	71.1	25	8	US-10-719-900-107069	Sequence 107069,
C 415	12.8	71.1	25	8	US-10-719-900-410313	Sequence 410313,
C 416	12.8	71.1	25	8	US-10-719-900-431205	Sequence 431205,
C 417	12.8	71.1	25	8	US-10-719-900-456979	Sequence 456979,
C 418	12.8	71.1	25	8	US-10-719-900-593559	Sequence 593559,
C 419	12.8	71.1	25	8	US-10-719-900-632179	Sequence 632179,
C 420	12.8	71.1	25	8	US-10-719-900-775744	Sequence 775744,
C 421	12.8	71.1	25	8	US-10-719-900-854974	Sequence 854974,
C 422	12.8	71.1	25	8	US-10-719-900-958370	Sequence 958370,
C 423	12.8	71.1	25	9	US-10-809-189-116639	Sequence 116639,
C 424	12.8	71.1	25	9	US-10-809-189-116640	Sequence 116640,
C 425	12.8	71.1	25	10	US-11-036-317-116677	Sequence 116677,
C 426	12.8	71.1	25	10	US-11-036-317-268411	Sequence 268411,
C 427	12.8	71.1	25	10	US-11-036-317-276276	Sequence 276276,
C 428	12.8	71.1	25	10	US-11-036-317-314882	Sequence 314882,
C 429	12.8	71.1	25	10	US-11-036-317-328819	Sequence 328819,
C 430	12.8	71.1	25	10	US-11-036-317-381366	Sequence 381366,
C 431	12.8	71.1	25	10	US-11-036-317-669101	Sequence 669101,
C 432	12.8	71.1	26	3	US-09-864-636A-2529	Sequence 2529, Ap
C 433	12.8	71.1	26	3	US-09-864-426A-2529	Sequence 2529, Ap
C 434	12.8	71.1	26	6	US-10-084-839-2529	Sequence 2529, Ap
C 435	12.4	68.9	14	10	US-11-021-729-30	Sequence 30, Appl
C 436	12.4	68.9	14	10	US-11-021-729-33	Sequence 33, Appl
C 437	12.4	68.9	20	9	US-10-257-158A-6857	Sequence 6857, Ap
C 438	12.4	68.9	22	3	US-09-888-326-749	Sequence 749, App
C 439	12.4	68.9	22	3	US-09-776-479-175	Sequence 175, App
C 440	12.4	68.9	22	3	US-09-776-479-175	Sequence 175, App
C 441	12.4	68.9	22	5	US-10-112-653-168	Sequence 168, App
C 442	12.4	68.9	22	5	US-10-017-995-175	Sequence 175, App
C 443	12.4	68.9	22	6	US-10-314-578-175	Sequence 175, App
C 444	12.4	68.9	22	8	US-10-831-778-175	Sequence 175, App
C 445	12.4	68.9	24	9	US-10-257-158A-2224	Sequence 2224, Ap
C 446	12.4	68.9	25	8	US-10-719-900-67200	Sequence 67200, A
C 447	12.4	68.9	25	8	US-10-719-900-115568	Sequence 115568,
C 448	12.4	68.9	25	8	US-10-719-900-896227	Sequence 896227,
C 449	12.4	68.9	25	10	US-11-036-317-9946	Sequence 9946, Ap
C 450	12.4	68.9	25	10	US-11-036-317-552455	Sequence 52445, A
C 451	12.4	68.9	25	10	US-11-036-317-554594	Sequence 53454, A
C 452	12.4	68.9	25	10	US-11-036-317-67388	Sequence 67388, A
C 453	12.4	68.9	25	10	US-11-036-317-118863	Sequence 118863,
C 454	12.4	68.9	25	10	US-11-036-317-468349	Sequence 468349,
C 455	12.4	68.9	25	10	US-11-036-317-489249	Sequence 489249,
C 456	12.4	68.9	25	10	US-11-036-317-548308	Sequence 548308,
C 457	12.4	68.9	25	10	US-11-036-317-754578	Sequence 754578,
C 458	12.4	68.9	25	10	US-11-036-317-759376	Sequence 759376,
C 459	12.4	68.9	25	10	US-11-036-317-828715	Sequence 828715,
C 460	12.2	67.8	18	3	US-09-263-959-1055	Sequence 1055, Ap
C 461	12.2	67.8	18	7	US-10-298-123-7	Sequence 7, Appl
C 462	12.2	67.8	25	7	US-10-681-773-37781	Sequence 37781, A
C 463	12.2	67.8	25	7	US-10-681-773-45653	Sequence 45653, A
C 464	12.2	67.8	25	7	US-10-681-773-56070	Sequence 56070, A
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C 469	12.2	67.8	25	7	US-10-719-956-17901	Sequence 77901, A
C 470	12.2	67.8	25	7	US-10-719-956-156101	Sequence 156101,
C 471	12.2	67.8	25	7	US-10-719-956-156102	Sequence 156102,
C 472	12.2	67.8	25	7	US-10-719-956-266433	Sequence 266433,
C 473	12.2	67.8	25	7	US-10-719-956-267424	Sequence 267424,
C 474	12.2	67.8	25	7	US-10-719-956-35067	Sequence 35067,
C 475	12.2	67.8	25	7	US-10-719-956-632144	Sequence 632144,
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C 479	12.2	67.8	25	8	US-10-719-900-201427	Sequence 201427,
C 480	12.2	67.8	25	8	US-10-719-900-482774	Sequence 482774,
C 481	12.2	67.8	25	8	US-10-719-900-652354	Sequence 652354,
C 482	12.2	67.8	25	8	US-10-719-900-740403	Sequence 740403,
C 483	12.2	67.8	25	8	US-10-719-900-833050	Sequence 833050,
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C 485	12.2	67.8	25	9	US-10-809-189-100142	Sequence 100142,
C 486	12.2	67.8	25	9	US-10-809-189-100143	Sequence 100143,
C 487	12.2	67.8	25	9	US-10-809-189-100144	Sequence 100144,
C 488	12.2	67.8	25	9	US-10-809-189-100145	Sequence 100145,
C 489	12.2	67.8	25	9	US-10-809-189-100146	Sequence 100146,
C 490	12.2	67.8	25	9	US-10-809-189-100147	Sequence 100147,
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C 493	12.2	67.8	25	10	US-11-036-317-266280	Sequence 266280,
C 494	12.2	67.8	25	10	US-11-036-317-268537	Sequence 268537,
C 495	12.2	67.8	25	10	US-11-036-317-314342	Sequence 314342,
C 496	12.2	67.8	25	10	US-11-036-317-322403	Sequence 322403,
C 497	12.2	67.8	25	10	US-11-036-317-328657	Sequence 328657,
C 498	12.2	67.8	25	10	US-11-036-317-45894	Sequence 34894,
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C 507	12.2	67.8	25	10	US-11-036-317-516914	Sequence 516914,
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C 509	12.2	67.8	25	10	US-11-036-317-622868	Sequence 622868,
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C 511	12.2	67.8	25	10	US-11-036-317-725311	Sequence 725311,
C 512	12.2	67.8	25	10	US-11-036-317-726311	Sequence 726311,
C 513	12.2	67.8	25	10	US-11-036-317-751193	Sequence 751193,
C 514	12.2	67.8	25	10	US-11-036-317-770162	Sequence 770162,
C 515	12.2	67.8	25	10	US-11-036-317-787612	Sequence 787612,
C 516	12.2	67.8	25	10	US-11-036-317-787613	Sequence 787613,
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C 521	12.2	67.8	25	10	US-11-036-317-914358	Sequence 914358,
C 522	12.2	67.8	25	10	US-11-036-317-914375	Sequence 915325,
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C 525	12.2	67.8	25	10	US-11-036-317-936727	Sequence 936727,
C 526	12.2	67.8	25	10	US-11-036-317-951400	Sequence 951400,
C 527	12.2	67.8	25	10	US-11-036-317-951400	Sequence 956519,
C 528	12.2	67.8	25	10	US-11-036-317-965619	Sequence 965620,
C 529	12.2	67.8	25	10	US-11-036-317-982741	Sequence 982742,
C 530	12.2	67.8	25	10	US-11-036-317-982742	Sequence 983111,
C 531	12.2	67.8	25	10	US-11-036-317-983311	Sequence 983312,
C 532	12.2	67.8	25	10	US-11-036-317-983312	Sequence 983312,
C 533	12.2	67.8	25	10	US-11-060-756-217899	Sequence 217899,
C 534	12	66.7	14	7	US-10-714-310-1	Sequence 1, Appl1



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C 536	12	66.7	19	8	US-10-764-238-80	Sequence 80, Appl	609	11.8	65.6	25	8	US-10-719-900-12154	Sequence 12154, A
C 537	12	66.7	19	8	US-10-781-581-80	Sequence 80, Appl	610	11.8	65.6	25	8	US-10-719-900-165653	Sequence 165653,
C 538	12	66.7	21	9	US-10-941-663A-137	Sequence 137, App	611	11.8	65.6	25	8	US-10-719-900-165654	Sequence 165654,
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C 543	12	66.7	25	8	US-10-719-900-360462	Sequence 360462,	616	11.8	65.6	25	8	US-10-719-900-360687	Sequence 360687,
C 544	12	66.7	25	8	US-10-719-900-414061	Sequence 414061,	617	11.8	65.6	25	8	US-10-719-900-511684	Sequence 511684,
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C 550	12	66.7	25	10	US-11-036-317-29382	Sequence 29382, A	623	11.8	65.6	25	8	US-10-719-900-829446	Sequence 829446,
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C 570	12	66.7	25	10	US-11-036-317-956907	Sequence 956907,	643	11.8	65.6	25	10	US-11-036-317-358785	Sequence 358785,
C 571	12	66.7	26	5	US-10-098-916A-7	Sequence 963441,	644	11.8	65.6	25	10	US-11-036-317-360355	Sequence 360355,
C 572	12	66.7	27	5	US-10-142-566-47	Sequence 47, Appl	645	11.8	65.6	25	10	US-11-036-317-382606	Sequence 382606,
C 573	12	66.7	30	7	US-10-714-310-15	Sequence 15, Appl	646	11.8	65.6	25	10	US-11-036-317-46765	Sequence 46765,
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575	11.8	65.6	16	3	US-09-864-636A-2334	Sequence 2324, Ap	648	11.8	65.6	25	10	US-11-036-317-46765	Sequence 46765,
576	11.8	65.6	16	3	US-09-864-636A-2334	Sequence 2324, Ap	649	11.8	65.6	25	10	US-11-036-317-46765	Sequence 46765,
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C 579	11.8	65.6	20	3	US-09-864-636A-2531	Sequence 2531, Ap	652	11.8	65.6	25	10	US-11-036-317-46765	Sequence 46765,
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C 582	11.8	65.6	22	3	US-09-921-922A-9	Sequence 9, Appl1	655	11.8	65.6	25	10	US-11-036-317-46765	Sequence 46765,
583	11.8	65.6	22	8	US-10-902-385-9	Sequence 9, Appl1	656	11.8	65.6	25	10	US-11-036-317-46765	Sequence 46765,
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C 585	11.8	65.6	25	5	US-10-098-263B-43421	Sequence 43421, A	658	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
C 586	11.8	65.6	25	5	US-10-098-263B-96288	Sequence 96288, A	659	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
C 587	11.8	65.6	25	7	US-10-719-956-30597	Sequence 30597, A	660	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
C 588	11.8	65.6	25	7	US-10-719-956-30598	Sequence 30598, A	661	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
C 589	11.8	65.6	25	7	US-10-719-956-83024	Sequence 83024, A	662	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
C 590	11.8	65.6	25	7	US-10-719-956-110451	Sequence 110451,	663	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
591	11.8	65.6	25	7	US-10-719-956-141155	Sequence 141155,	664	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
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C 595	11.8	65.6	25	7	US-10-719-956-252521	Sequence 252521,	668	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
C 596	11.8	65.6	25	7	US-10-719-956-273617	Sequence 273617,	669	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
C 597	11.8	65.6	25	7	US-10-719-956-384635	Sequence 384635,	670	11.8	65.6	25	10	US-11-036-317-822903	Sequence 822903,
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C 601	11.8	65.6	25	7	US-10-719-956-456113	Sequence 456113,	674	11.8	65.6	30	9	US-10-704-556-44	Sequence 44, App-
C 602	11.8	65.6	25	7	US-10-719-956-513431	Sequence 513431,	675	11.6	64.4	18	5	US-10-142-566-46	Sequence 46, Appl
C 603	11.8	65.6	25	7	US-10-719-956-541548	Sequence 541548,	676	11.6	64.4	18	5	US-10-142-566-46	Sequence 46, Appl
C 604	11.8	65.6	25	7	US-10-719-956-552532	Sequence 552532,	677	11.6	64.4	18	6	US-10-142-566-46	Sequence 46, Appl
C 605	11.8	65.6	25	7	US-10-719-956-616731	Sequence 616731,	678	11.6	64.4	20	7	US-10-671-395-451	Sequence 451, App
C 606	11.8	65.6	25	7	US-10-719-956-616732	Sequence 616732,	679	11.6	64.4	20	7	US-10-671-395-451	Sequence 451, App
607	11.8	65.6	25	7	US-10-719-956-697334	Sequence 697334,	680	11.6	64.4	20	7	US-10-671-395-451	Sequence 451, App

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C 682	11.6	64.4	25	7	US-10-681-773-106818	Sequence 106818,	C 755	11.4	63.3	25	5	US-10-215-112-6671	Sequence 6671, Ap
C 683	11.6	64.4	25	7	US-10-719-956-9334	Sequence 9334, Ap	C 756	11.4	63.3	25	7	US-10-719-956-21715	Sequence 21715, A
C 684	11.6	64.4	25	7	US-10-719-956-171278	Sequence 171278,	C 757	11.4	63.3	25	7	US-10-719-956-110263	Sequence 110263,
C 685	11.6	64.4	25	7	US-10-719-956-185671	Sequence 185671,	C 758	11.4	63.3	25	7	US-10-719-956-116459	Sequence 116459,
C 686	11.6	64.4	25	7	US-10-719-956-235370	Sequence 235370,	C 759	11.4	63.3	25	7	US-10-719-956-135677	Sequence 135677,
C 687	11.6	64.4	25	7	US-10-719-956-235371	Sequence 235371,	C 760	11.4	63.3	25	7	US-10-719-956-142740	Sequence 142740,
C 688	11.6	64.4	25	7	US-10-719-956-255806	Sequence 255806,	C 761	11.4	63.3	25	7	US-10-719-956-184642	Sequence 184642,
C 689	11.6	64.4	25	7	US-10-719-956-283397	Sequence 283397,	C 762	11.4	63.3	25	7	US-10-719-956-194285	Sequence 194285,
C 690	11.6	64.4	25	7	US-10-719-956-368323	Sequence 368323,	C 763	11.4	63.3	25	7	US-10-719-956-219877	Sequence 219877,
C 691	11.6	64.4	25	7	US-10-719-956-456747	Sequence 456747,	C 764	11.4	63.3	25	7	US-10-719-956-287393	Sequence 287393,
C 692	11.6	64.4	25	7	US-10-719-956-536172	Sequence 536172,	C 765	11.4	63.3	25	7	US-10-719-956-360987	Sequence 360987,
C 693	11.6	64.4	25	7	US-10-719-956-566582	Sequence 566582,	C 766	11.4	63.3	25	7	US-10-719-956-383636	Sequence 383636,
C 694	11.6	64.4	25	7	US-10-719-956-567423	Sequence 567423,	C 767	11.4	63.3	25	7	US-10-719-956-384724	Sequence 384724,
C 695	11.6	64.4	25	7	US-10-719-956-573656	Sequence 573656,	C 768	11.4	63.3	25	7	US-10-719-956-451167	Sequence 451167,
C 696	11.6	64.4	25	7	US-10-719-956-634367	Sequence 634367,	C 769	11.4	63.3	25	7	US-10-719-956-456259	Sequence 456259,
C 697	11.6	64.4	25	7	US-10-719-956-644315	Sequence 644315,	C 770	11.4	63.3	25	7	US-10-719-956-516078	Sequence 516078,
C 698	11.6	64.4	25	7	US-10-719-956-687083	Sequence 687083,	C 771	11.4	63.3	25	7	US-10-719-956-544837	Sequence 544837,
C 699	11.6	64.4	25	7	US-10-719-956-697267	Sequence 697267,	C 772	11.4	63.3	25	7	US-10-719-956-554443	Sequence 554443,
C 700	11.6	64.4	25	8	US-10-719-900-62580	Sequence 62580, A	C 773	11.4	63.3	25	7	US-10-719-956-617066	Sequence 617066,
C 701	11.6	64.4	25	8	US-10-719-900-167512	Sequence 167512,	C 774	11.4	63.3	25	7	US-10-719-956-625995	Sequence 625995,
C 702	11.6	64.4	25	8	US-10-719-900-223122	Sequence 223122,	C 775	11.4	63.3	25	7	US-10-719-956-634666	Sequence 634666,
C 703	11.6	64.4	25	8	US-10-719-900-234773	Sequence 234773,	C 776	11.4	63.3	25	7	US-10-719-956-655726	Sequence 655726,
C 704	11.6	64.4	25	8	US-10-719-900-237108	Sequence 237108,	C 777	11.4	63.3	25	7	US-10-719-956-675622	Sequence 675622,
C 705	11.6	64.4	25	8	US-10-719-900-265290	Sequence 265290,	C 778	11.4	63.3	25	7	US-10-719-956-68781	Sequence 68781, Ap
C 706	11.6	64.4	25	8	US-10-719-900-300596	Sequence 300596,	C 779	11.4	63.3	25	8	US-10-719-900-35818	Sequence 35818, A
C 707	11.6	64.4	25	8	US-10-719-900-323520	Sequence 323520,	C 780	11.4	63.3	25	8	US-10-719-900-38061	Sequence 38061, A
C 708	11.6	64.4	25	8	US-10-719-900-323521	Sequence 323521,	C 781	11.4	63.3	25	8	US-10-719-900-91211	Sequence 91211, A
C 709	11.6	64.4	25	8	US-10-719-900-493736	Sequence 493736,	C 782	11.4	63.3	25	8	US-10-719-900-122138	Sequence 122138,
C 710	11.6	64.4	25	8	US-10-719-900-625274	Sequence 625274,	C 783	11.4	63.3	25	8	US-10-719-900-166426	Sequence 166426,
C 711	11.6	64.4	25	8	US-10-719-900-649823	Sequence 649823,	C 784	11.4	63.3	25	8	US-10-719-900-294975	Sequence 294975,
C 712	11.6	64.4	25	8	US-10-719-900-649881	Sequence 649881,	C 785	11.4	63.3	25	8	US-10-719-900-355297	Sequence 355297,
C 713	11.6	64.4	25	8	US-10-719-900-690988	Sequence 690988,	C 786	11.4	63.3	25	8	US-10-719-900-375581	Sequence 375581,
C 714	11.6	64.4	25	8	US-10-719-900-690989	Sequence 690989,	C 787	11.4	63.3	25	8	US-10-719-900-493225	Sequence 493225,
C 715	11.6	64.4	25	8	US-10-719-900-789598	Sequence 789598,	C 788	11.4	63.3	25	8	US-10-719-900-748413	Sequence 748413,
C 716	11.6	64.4	25	8	US-10-719-900-941021	Sequence 941021,	C 789	11.4	63.3	25	8	US-10-719-900-799373	Sequence 799373,
C 717	11.6	64.4	25	8	US-10-809-900-941022	Sequence 941022,	C 790	11.4	63.3	25	8	US-10-719-900-847343	Sequence 847343,
C 718	11.6	64.4	25	9	US-10-809-189-109444	Sequence 109444,	C 791	11.4	63.3	25	9	US-10-719-900-862170	Sequence 862170,
C 719	11.6	64.4	25	9	US-10-809-189-109444	Sequence 109444,	C 792	11.4	63.3	25	9	US-10-809-189-67861	Sequence 67861, A
C 720	11.6	64.4	25	9	US-10-956-157-74476	Sequence 74476, A	C 793	11.4	63.3	25	8	US-10-719-900-735762	Sequence 735762,
C 721	11.6	64.4	25	9	US-10-956-157-178168	Sequence 178168,	C 794	11.4	63.3	25	8	US-10-719-900-736762	Sequence 736762,
C 722	11.6	64.4	25	9	US-10-956-157-290227	Sequence 290227,	C 795	11.4	63.3	25	8	US-10-719-900-799373	Sequence 799373,
C 723	11.6	64.4	25	9	US-10-956-157-293813	Sequence 293813,	C 796	11.4	63.3	25	8	US-10-719-900-847343	Sequence 847343,
C 724	11.6	64.4	25	10	US-11-036-317-532338	Sequence 532338, A	C 797	11.4	63.3	25	8	US-10-843-527-6001	Sequence 6001, Ap
C 725	11.6	64.4	25	10	US-11-036-317-56269	Sequence 56269, A	C 798	11.4	63.3	25	8	US-10-843-527-6001	Sequence 6001, Ap
C 726	11.6	64.4	25	10	US-11-036-317-84571	Sequence 84571, A	C 799	11.4	63.3	25	8	US-10-843-527-6001	Sequence 6001, Ap
C 727	11.6	64.4	25	10	US-11-036-317-94723	Sequence 94723, A	C 800	11.4	63.3	25	8	US-10-843-527-6001	Sequence 6001, Ap
C 728	11.6	64.4	25	10	US-11-036-317-412696	Sequence 412696,	C 801	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 729	11.6	64.4	25	10	US-11-036-317-460176	Sequence 460176,	C 802	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 730	11.6	64.4	25	10	US-11-036-317-467522	Sequence 467522,	C 803	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 731	11.6	64.4	25	10	US-11-036-317-521724	Sequence 521724,	C 804	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 732	11.6	64.4	25	10	US-11-036-317-554140	Sequence 554140,	C 805	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 733	11.6	64.4	25	10	US-11-036-317-656596	Sequence 656596,	C 806	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 734	11.6	64.4	25	10	US-11-036-317-668163	Sequence 668163,	C 807	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 735	11.6	64.4	25	10	US-11-036-317-716978	Sequence 716978,	C 808	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 736	11.6	64.4	25	10	US-11-036-317-721851	Sequence 721851,	C 809	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 737	11.6	64.4	25	10	US-11-036-317-740114	Sequence 740114,	C 810	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 738	11.6	64.4	25	10	US-11-036-317-841861	Sequence 841861,	C 811	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 739	11.6	64.4	25	10	US-11-036-317-988173	Sequence 988173,	C 812	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 740	11.6	64.4	25	10	US-11-060-756-103813	Sequence 103813,	C 813	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 741	11.6	64.4	25	10	US-11-060-756-103814	Sequence 103814,	C 814	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 742	11.6	64.4	25	10	US-11-060-756-103815	Sequence 103815,	C 815	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
C 743	11.6	64.4	25	10	US-11-060-756-257093	Sequence 257093,	C 816	11.4	63.3	25	9	US-10-843-527-6001	Sequence 6001, Ap
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C 745	11.6	64.4	30	6	US-10-138-503-9	Sequence 9, Appl1	C 818	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 746	11.6	64.4	30	6	US-10-138-503-10	Sequence 10, Appl1	C 819	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 747	11.6	64.4	30	9	US-10-703-817-130	Sequence 130, Ap	C 820	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 748	11.4	63.3	13	10	US-11-021-729-31	Sequence 31, Appl	C 821	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 749	11.4	63.3	13	10	US-11-021-729-31	Sequence 31, Appl	C 822	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 750	11.4	63.3	17	7	US-10-712-672-1838	Sequence 1838, Ap	C 823	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 751	11.4	63.3	20	9	US-10-257-158A-5457	Sequence 5457, Ap	C 824	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 752	11.4	63.3	20	9	US-10-257-158A-8449	Sequence 8449, Ap	C 825	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3
C 753	11.4	63.3	24	9	US-10-257-158A-824	Sequence 824, Ap	C 826	11.4	63.3	25	10	US-10-376-763A-16	Sequence 16, Appl3

C 827	11.4	63.3	25	10	US-11-036-317-505870	Sequence 505870,	C 900	11.2	62.2	25	7	US-10-719-956-678485	Sequence 678485,
C 828	11.4	63.3	25	10	US-11-036-317-544404	Sequence 544404,	C 901	11.2	62.2	25	7	US-10-719-956-684574	Sequence 684574,
C 829	11.4	63.3	25	10	US-11-036-317-593349	Sequence 593349,	C 902	11.2	62.2	25	7	US-10-719-956-690171	Sequence 690171,
C 830	11.4	63.3	25	10	US-11-036-317-697852	Sequence 697852,	C 903	11.2	62.2	25	8	US-10-775-169-5174	Sequence 5174, Ap
C 831	11.4	63.3	25	10	US-11-036-317-826862	Sequence 826862,	C 904	11.2	62.2	25	8	US-10-775-169-5175	Sequence 5175, Ap
C 832	11.4	63.3	25	10	US-11-036-317-850260	Sequence 850260,	C 905	11.2	62.2	25	8	US-10-775-169-5176	Sequence 5176, Ap
C 833	11.4	63.3	25	10	US-11-036-317-897397	Sequence 897397,	C 906	11.2	62.2	25	8	US-10-775-169-5177	Sequence 5177, Ap
C 834	11.4	63.3	25	10	US-11-036-317-949901	Sequence 949901,	C 907	11.2	62.2	25	8	US-10-775-169-5178	Sequence 5178, Ap
C 835	11.4	63.3	25	10	US-11-036-317-971389	Sequence 971389,	C 908	11.2	62.2	25	8	US-10-719-900-38319	Sequence 38319, A
C 836	11.4	63.3	25	10	US-11-036-317-983395	Sequence 983395,	C 909	11.2	62.2	25	8	US-10-719-900-69396	Sequence 69396, A
C 837	11.2	62.2	19	9	US-10-708-204-3140	Sequence 3140, Ap	C 910	11.2	62.2	25	8	US-10-719-900-76064	Sequence 76064, A
C 838	11.2	62.2	20	6	US-10-151-7548-16	Sequence 16, Appl1	C 911	11.2	62.2	25	8	US-10-719-900-107070	Sequence 107070,
C 839	11.2	62.2	20	6	US-10-056-454A-9	Sequence 9, Appl1	C 912	11.2	62.2	25	8	US-10-719-900-118912	Sequence 118912,
C 840	11.2	62.2	20	9	US-10-257-158A-6982	Sequence 6982, Ap	C 913	11.2	62.2	25	8	US-10-719-900-181444	Sequence 181444,
C 841	11.2	62.2	20	9	US-10-840-590-1469	Sequence 1469, Ap	C 914	11.2	62.2	25	8	US-10-719-900-120113	Sequence 202113,
C 842	11.2	62.2	20	9	US-10-840-590-1470	Sequence 1470, Ap	C 915	11.2	62.2	25	8	US-10-719-900-202114	Sequence 202114,
C 843	11.2	62.2	21	7	US-10-392-837A-36	Sequence 36, Appl1	C 916	11.2	62.2	25	8	US-10-719-900-203377	Sequence 203377,
C 844	11.2	62.2	22	9	US-10-845-057-135	Sequence 135, App	C 917	11.2	62.2	25	8	US-10-719-900-203378	Sequence 203378,
C 845	11.2	62.2	22	9	US-10-845-057-441	Sequence 441, App	C 918	11.2	62.2	25	8	US-10-719-900-205819	Sequence 205819,
C 846	11.2	62.2	22	9	US-10-708-204-3142	Sequence 3142, Ap	C 919	11.2	62.2	25	8	US-10-719-900-205820	Sequence 205820,
C 847	11.2	62.2	23	8	US-10-845-059-18	Sequence 18, Appl1	C 920	11.2	62.2	25	8	US-10-719-900-295864	Sequence 295864,
C 848	11.2	62.2	23	9	US-10-708-204-3125	Sequence 3125, Ap	C 921	11.2	62.2	25	8	US-10-719-900-299740	Sequence 299740,
C 849	11.2	62.2	23	9	US-10-708-204-3141	Sequence 3141, Ap	C 922	11.2	62.2	25	8	US-10-719-900-330577	Sequence 330577,
C 850	11.2	62.2	23	9	US-10-708-204-3147	Sequence 3147, Ap	C 923	11.2	62.2	25	8	US-10-719-900-336458	Sequence 336458,
C 851	11.2	62.2	24	3	US-09-940-185-3305	Sequence 3305, Ap	C 924	11.2	62.2	25	8	US-10-719-900-363050	Sequence 363050,
C 852	11.2	62.2	24	9	US-10-257-158A-2349	Sequence 2349, Ap	C 925	11.2	62.2	25	8	US-10-719-900-410314	Sequence 410314,
C 853	11.2	62.2	24	9	US-10-257-158A-2445	Sequence 2445, Ap	C 926	11.2	62.2	25	8	US-10-719-900-416007	Sequence 416007,
C 854	11.2	62.2	24	9	US-10-631-467-1742	Sequence 1742, Ap	C 927	11.2	62.2	25	8	US-10-719-900-424488	Sequence 424488,
C 855	11.2	62.2	24	9	US-10-708-204-3146	Sequence 3146, Ap	C 928	11.2	62.2	25	8	US-10-719-900-424489	Sequence 424489,
C 856	11.2	62.2	24	9	US-10-708-204-3148	Sequence 3148, Ap	C 929	11.2	62.2	25	8	US-10-719-900-431204	Sequence 431204,
C 857	11.2	62.2	25	3	US-09-864-636A-703	Sequence 703, App	C 930	11.2	62.2	25	8	US-10-719-900-433504	Sequence 433504,
C 858	11.2	62.2	25	3	US-09-864-626A-703	Sequence 703, App	C 931	11.2	62.2	25	8	US-10-719-900-453187	Sequence 453187,
C 859	11.2	62.2	25	5	US-10-215-112-9711	Sequence 9711, Ap	C 932	11.2	62.2	25	8	US-10-719-900-456978	Sequence 456978,
C 860	11.2	62.2	25	5	US-10-098-263B-18009	Sequence 18009, A	C 933	11.2	62.2	25	8	US-10-719-900-460853	Sequence 460853,
C 861	11.2	62.2	25	5	US-10-098-263B-28245	Sequence 28245, A	C 934	11.2	62.2	25	8	US-10-719-900-475421	Sequence 475421,
C 862	11.2	62.2	25	5	US-10-098-263B-97964	Sequence 97964, A	C 935	11.2	62.2	25	8	US-10-719-900-593358	Sequence 593358,
C 863	11.2	62.2	25	5	US-10-098-263B-130824	Sequence 130824,	C 936	11.2	62.2	25	8	US-10-719-900-615424	Sequence 615424,
C 864	11.2	62.2	25	5	US-10-098-263B-131052	Sequence 131052,	C 937	11.2	62.2	25	8	US-10-719-900-615425	Sequence 615425,
C 865	11.2	62.2	25	6	US-10-084-839-703	Sequence 703, App	C 938	11.2	62.2	25	8	US-10-719-900-633178	Sequence 633178,
C 866	11.2	62.2	25	6	US-10-084-839-3295	Sequence 3295, App	C 939	11.2	62.2	25	8	US-10-719-900-696390	Sequence 696390,
C 867	11.2	62.2	25	7	US-10-681-773-55542	Sequence 55542, A	C 940	11.2	62.2	25	8	US-10-719-900-748378	Sequence 748378,
C 868	11.2	62.2	25	7	US-10-719-956-8813	Sequence 8813, Ap	C 941	11.2	62.2	25	8	US-10-719-900-763645	Sequence 763645,
C 869	11.2	62.2	25	7	US-10-719-956-17607	Sequence 17607, A	C 942	11.2	62.2	25	8	US-10-719-900-775745	Sequence 775745,
C 870	11.2	62.2	25	7	US-10-719-956-20576	Sequence 20576, A	C 943	11.2	62.2	25	8	US-10-719-900-788296	Sequence 788296,
C 871	11.2	62.2	25	7	US-10-719-956-58338	Sequence 58338, A	C 944	11.2	62.2	25	8	US-10-719-900-788297	Sequence 788297,
C 872	11.2	62.2	25	7	US-10-719-956-63830	Sequence 63830, A	C 945	11.2	62.2	25	8	US-10-719-900-809597	Sequence 809597,
C 873	11.2	62.2	25	7	US-10-719-956-140471	Sequence 140471,	C 946	11.2	62.2	25	8	US-10-719-900-815705	Sequence 815705,
C 874	11.2	62.2	25	7	US-10-719-956-160350	Sequence 160350,	C 947	11.2	62.2	25	8	US-10-719-900-822972	Sequence 822972,
C 875	11.2	62.2	25	7	US-10-719-956-181148	Sequence 181148,	C 948	11.2	62.2	25	8	US-10-719-900-854973	Sequence 854973,
C 876	11.2	62.2	25	7	US-10-719-956-208505	Sequence 208505,	C 949	11.2	62.2	25	8	US-10-719-900-886380	Sequence 886380,
C 877	11.2	62.2	25	7	US-10-719-956-272136	Sequence 272136,	C 950	11.2	62.2	25	8	US-10-719-900-908278	Sequence 908278,
C 878	11.2	62.2	25	7	US-10-719-956-278663	Sequence 278663,	C 951	11.2	62.2	25	8	US-10-719-900-941402	Sequence 941402,
C 879	11.2	62.2	25	7	US-10-719-956-329713	Sequence 329713,	C 952	11.2	62.2	25	8	US-10-719-900-954404	Sequence 954404,
C 880	11.2	62.2	25	7	US-10-719-956-334707	Sequence 334707,	C 953	11.2	62.2	25	8	US-10-719-900-954648	Sequence 954648,
C 881	11.2	62.2	25	7	US-10-719-956-399628	Sequence 399628,	C 954	11.2	62.2	25	8	US-10-719-900-958369	Sequence 958369,
C 882	11.2	62.2	25	7	US-10-719-956-401078	Sequence 401078,	C 955	11.2	62.2	25	8	US-10-719-900-968978	Sequence 968978,
C 883	11.2	62.2	25	7	US-10-719-956-401079	Sequence 401079,	C 956	11.2	62.2	25	8	US-10-719-900-974809	Sequence 974809,
C 884	11.2	62.2	25	7	US-10-719-956-428953	Sequence 428953,	C 957	11.2	62.2	25	9	US-10-809-189-12551	Sequence 12551, A
C 885	11.2	62.2	25	7	US-10-719-956-435912	Sequence 435912,	C 958	11.2	62.2	25	9	US-10-809-189-25689	Sequence 25689, A
C 886	11.2	62.2	25	7	US-10-719-956-435913	Sequence 435913,	C 959	11.2	62.2	25	9	US-10-809-189-51848	Sequence 51848, A
C 887	11.2	62.2	25	7	US-10-719-956-480930	Sequence 480930,	C 960	11.2	62.2	25	9	US-10-809-189-51865	Sequence 51865, A
C 888	11.2	62.2	25	7	US-10-719-956-524575	Sequence 524575,	C 961	11.2	62.2	25	9	US-10-809-189-64277	Sequence 64277, A
C 889	11.2	62.2	25	7	US-10-719-956-531287	Sequence 531287,	C 962	11.2	62.2	25	9	US-10-809-189-68659	Sequence 68659, A
C 890	11.2	62.2	25	7	US-10-719-956-552224	Sequence 552224,	C 963	11.2	62.2	25	9	US-10-809-189-65660	Sequence 65660, A
C 891	11.2	62.2	25	7	US-10-719-956-591399	Sequence 591399,	C 964	11.2	62.2	25	9	US-10-809-189-65661	Sequence 65661, A
C 892	11.2	62.2	25	7	US-10-719-956-591430	Sequence 591430,	C 965	11.2	62.2	25	9	US-10-809-189-70835	Sequence 70835, A
C 893	11.2	62.2	25	7	US-10-719-956-619928	Sequence 619928,	C 966	11.2	62.2	25	9	US-10-809-189-76001	Sequence 76001, A
C 894	11.2	62.2	25	7	US-10-719-956-628936	Sequence 628936,	C 967	11.2	62.2	25	9	US-10-809-189-100148	Sequence 100148,
C 895	11.2	62.2	25	7	US-10-719-956-629376	Sequence 629376,	C 968	11.2	62.2	25	9	US-10-809-189-107962	Sequence 107962,
C 896	11.2	62.2	25	7	US-10-719-956-634387	Sequence 634387,	C 969	11.2	62.2	25	9	US-10-956-157-171186	Sequence 171186,
C 897	11.2	62.2	25	7	US-10-719-956-634388	Sequence 634388,	C 970	11.2	62.2	25	9	US-10-956-157-181062	Sequence 181062,
C 898	11.2	62.2	25	7	US-10-719-956-671965	Sequence 671965,	C 971	11.2	62.2	25	9	US-10-956-157-181130	Sequence 181130,
C 899	11.2	62.2	25	7	US-10-719-956-671966	Sequence 671966,	C 972	11.2	62.2	25	9	US-10-956-157-186586	Sequence 186586,

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c 973 11.2 62.2 25 9 US-10-956-157-190506 Sequence 190506,
974 11.2 62.2 25 9 US-10-956-157-199269 Sequence 199269,
975 11.2 62.2 25 9 US-10-956-157-216244 Sequence 216244,
c 976 11.2 62.2 25 9 US-10-956-157-259634 Sequence 259634,
c 977 11.2 62.2 25 9 US-10-956-157-277111 Sequence 277111,
978 11.2 62.2 25 9 US-10-956-157-293701 Sequence 293701,
c 979 11.2 62.2 25 9 US-10-956-157-316227 Sequence 316227,
c 980 11.2 62.2 25 10 US-11-036-317-38302 Sequence 38302, A
c 981 11.2 62.2 25 10 US-11-036-317-45251 Sequence 45251, A
c 982 11.2 62.2 25 10 US-11-036-317-47586 Sequence 47586, A
c 983 11.2 62.2 25 10 US-11-036-317-50728 Sequence 50728, A
c 984 11.2 62.2 25 10 US-11-036-317-72854 Sequence 72854, A
c 985 11.2 62.2 25 10 US-11-036-317-76976 Sequence 76976, A
c 986 11.2 62.2 25 10 US-11-036-317-78579 Sequence 78579, A
c 987 11.2 62.2 25 10 US-11-036-317-89142 Sequence 89142, A
c 988 11.2 62.2 25 10 US-11-036-317-128071 Sequence 128071, A
c 989 11.2 62.2 25 10 US-11-036-317-138242 Sequence 138242, A
c 990 11.2 62.2 25 10 US-11-036-317-156176 Sequence 156176, A
c 991 11.2 62.2 25 10 US-11-036-317-167397 Sequence 167397, A
c 992 11.2 62.2 25 10 US-11-036-317-172048 Sequence 172048, A
c 993 11.2 62.2 25 10 US-11-036-317-178300 Sequence 178300, A
c 994 11.2 62.2 25 10 US-11-036-317-200125 Sequence 200125, A
c 995 11.2 62.2 25 10 US-11-036-317-208577 Sequence 208577, A
c 996 11.2 62.2 25 10 US-11-036-317-212257 Sequence 212257, A
c 997 11.2 62.2 25 10 US-11-036-317-214876 Sequence 214876, A
c 998 11.2 62.2 25 10 US-11-036-317-219764 Sequence 219764, A
c 999 11.2 62.2 25 10 US-11-036-317-230240 Sequence 230240, A
c1000 11.2 62.2 25 10 US-11-060-756-279728 Sequence 279728, A
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## ALIGNMENTS

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RESULT 1
US-09-760-506-2
; Sequence 2, Application US/09760506
; Publication No. US20010034330A1
; GENERAL INFORMATION:
; APPLICANT: Kensell, Charlotte
; TITLE OF INVENTION: Innate Immunity-Stimulating Compositions of CpG and
; FILE OF INVENTION: Saponin and Methods Thereof
; FILE REFERENCE: 8449-153-999
; CURRENT APPLICATION NUMBER: US/09/760,506
; CURRENT FILING DATE: 2002-01-12
; PRIOR APPLICATION NUMBER: 60/200,853
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/175,840
; PRIOR FILING DATE: 2000-01-13
; PRIOR APPLICATION NUMBER: 60/128,608
; PRIOR FILING DATE: 1999-04-08
; PRIOR APPLICATION NUMBER: 60/095,913
; PRIOR FILING DATE: 1998-08-10
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Motif
US-09-760-506-2
```

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Query Match 100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 1 TCTCCAGCGTGGCCCAT 18
Db 1 TCTCCAGCGTGGCCCAT 18
```

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RESULT 2
US-09-824-468-59
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```
; Sequence 59, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Methods and Products for Stimulating the
; FILE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 59
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-59
Query Match 100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TCTCCAGCGTGGCCCAT 18
Db 1 TCTCCAGCGTGGCCCAT 18
```

```
RESULT 3
US-09-824-468-104
; Sequence 104, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Methods and Products for Stimulating the
; FILE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 104
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-104
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```
Query Match 100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
Qy 1 TCTCCAGCGTGGCCCAT 18
Db 1 TCTCCAGCGTGGCCCAT 18
```

```
RESULT 4
US-09-965-116A-7/c
; Sequence 7, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
; APPLICANT: Kandimala, Ekambar R.
; APPLICANT: Zhao, Qiyuan
```

```

; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; TITLE OF INVENTION: Positional Chemical Changes
; FILE REFERENCE: HYZ-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; PRIOR FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; PRIOR FILING DATE: 2000-09-26
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthesis of end-blocked CpG-pS modified oligodeoxynucleotide
; US-09-965-116A-7

```

```

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 TCTCCAGCGTGGCCAT 18
Db      18 TCTCCAGCGTGGCCAT 1

```

```

RESULT 5
; Sequence 77, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
; APPLICANT: Kandimala, Ekambar R.
; APPLICANT: Zhao, Qiyuan
; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; FILE REFERENCE: HYZ-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; PRIOR FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; PRIOR FILING DATE: 2000-09-26
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: modified linkage of oligodeoxynucleotide phosphorothioate
; US-09-965-116A-77

```

```

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 TCTCCAGCGTGGCCAT 18
Db      1 TCTCCAGCGTGGCCAT 18

```

```

RESULT 6
; Sequence 98, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
; APPLICANT: Kandimala, Ekambar R.
; APPLICANT: Zhao, Qiyuan
; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; FILE REFERENCE: HYZ-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; PRIOR FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; PRIOR FILING DATE: 2000-09-26
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
; US-09-965-116A-98

```

```

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 TCTCCAGCGTGGCCAT 18
Db      1 TCTCCAGCGTGGCCAT 18

```

```

RESULT 7
; Sequence 99, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
; APPLICANT: Kandimala, Ekambar R.
; APPLICANT: Zhao, Qiyuan
; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; FILE REFERENCE: HYZ-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; PRIOR FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; PRIOR FILING DATE: 2000-09-26
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 99
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
; LOCATION: 10,14

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```

Qy      1 TCTCCAGCGTGGCCAT 18
Db      1 TCTCCAGCGTGGCCAT 18

```

OTHER INFORMATION: g at positions 10 and 14 = 7-deazaguanine  
US-09-965-116A-99

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
DB 1 TCTCCAGCGTGGCCCAT 18

## RESULT 8

US-09-800-266A-51  
Sequence 51, Application US/09800266A  
Patent No. US20020156033A1  
GENERAL INFORMATION:  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
TITLE OF INVENTION: Immunostimulatory Nucleic Acids and  
TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of  
TITLE OF INVENTION: Cancer  
FILE REFERENCE: C1037/7017(HCL/MAT)  
CURRENT APPLICATION NUMBER: US/09/800,266A  
CURRENT FILING DATE: 2001-03-05  
PRIOR APPLICATION NUMBER: US 60/187,214  
PRIOR FILING DATE: 2000-03-03  
NUMBER OF SEQ ID NOS: 146  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 51  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-800-266A-51

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
DB 1 TCTCCAGCGTGGCCCAT 18

## RESULT 9

US-09-895-007A-51  
Sequence 51, Application US/09895007A  
Patent No. US20020165178A1  
GENERAL INFORMATION:  
APPLICANT: Schetter, Christian  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE  
TITLE OF INVENTION: TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA  
FILE REFERENCE: C1041/7014 (AM6)  
CURRENT APPLICATION NUMBER: US/09/895,007A  
CURRENT FILING DATE: 2001-06-28  
PRIOR APPLICATION NUMBER: US 60/214,368  
PRIOR FILING DATE: 2000-06-28  
NUMBER OF SEQ ID NOS: 133  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 51  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide  
US-09-895-007A-51

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
DB 1 TCTCCAGCGTGGCCCAT 18

## RESULT 10

US-09-835-371-21  
Sequence 21, Application US/09835371  
Publication No. US20020187473A1  
GENERAL INFORMATION:  
APPLICANT: UHLMANN, Eugen  
APPLICANT: BREIPOHL, Gerhard  
APPLICANT: WILF, David W  
TITLE OF INVENTION: POLYAMIDE NUCLEIC ACID DERIVATIVES, AND AGENTS AND  
TITLE OF INVENTION: PROCESSES FOR PREPARING THEM  
FILE REFERENCE: 02481.1743 SEQUENCE LISTING  
CURRENT APPLICATION NUMBER: US/09/835,371  
NUMBER OF SEQ ID NOS: 53  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 21  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: base sequence  
OTHER INFORMATION: of PNA targeting CMV  
US-09-835-371-21

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
DB 1 TCTCCAGCGTGGCCCAT 18

## RESULT 11

US-09-920-313-51  
Sequence 51, Application US/09920313  
Publication No. US20020198165A1  
GENERAL INFORMATION:  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
TITLE OF INVENTION: Nucleic Acids for the Prevention and  
TITLE OF INVENTION: Treatment of Gastric Ulcers  
FILE REFERENCE: C1037/7019 (HCL/MAT)  
CURRENT APPLICATION NUMBER: US/09/920,313  
CURRENT FILING DATE: 2001-08-01  
PRIOR APPLICATION NUMBER: US 60/222,248  
PRIOR FILING DATE: 2001-08-08  
NUMBER OF SEQ ID NOS: 148  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 51  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-920-313-51

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
DB 1 TCTCCAGCGTGGCCCAT 18

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RESULT 12
US-09-835-370-21
; Sequence 21, Application US/09835370
; Publication No. US20030022172A1
; GENERAL INFORMATION:
; APPLICANT: UHLMANN, EUGEN
; APPLICANT: BREIPOHL, GERHARD
; APPLICANT: WILF, DAVID W
; TITLE OF INVENTION: POLYAMIDE NUCLEIC ACID DERIVATIVES AND AGENTS AND
; FILE REFERENCE: 02481.1742 SEQUENCE LISTING
; CURRENT FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: nucleotide
; OTHER INFORMATION: base sequence of PNA derivatives that bind to
; OTHER INFORMATION: viral and cellular targets
US-09-835-370-21

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
Db 1 TCTCCAGCGTGGCCCAT 18

RESULT 13
US-09-888-326-755
; Sequence 755, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; FILE REFERENCE: C1039/7052 (AMS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 755
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-755

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
Db 1 TCTCCAGCGTGGCCCAT 18

RESULT 14
US-09-888-326-756
; Sequence 756, Application US/09888326
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; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; FILE REFERENCE: C1039/7052 (AMS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 756
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
US-09-888-326-756

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
Db 1 TCTCCAGCGTGGCCCAT 18

RESULT 15
US-09-931-732-20
; Sequence 20, Application US/09931732
; Publication No. US20030045488A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; APPLICANT: Riley, Timothy A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES COMPRISING
; FILE REFERENCE: OASBIO.001C1
; CURRENT APPLICATION NUMBER: US/09/931,732
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: PCT/US00/09293
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: US 60/128,377
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide primers
US-09-931-732-20

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
Db 1 TCTCCAGCGTGGCCCAT 18

RESULT 16
US-09-818-918-55
; Sequence 55, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
```

```

; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Kliman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AMS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-55

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
    |||||
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 17
US-09-776-479-1
; Sequence 1, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fournon, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-1

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
    |||||
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 18
US-09-776-479-54
; Sequence 54, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fournon, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
```

```

; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fournon, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 54
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-54

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
    |||||
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 19
US-09-776-479-55
; Sequence 55, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fournon, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-55

Query Match          100.0%; Score 18; DB 3; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
    |||||
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 20
US-09-776-479-91
; Sequence 91, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fournon, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
```



;; CURRENT APPLICATION NUMBER: US/09/776,479  
;; CURRENT FILING DATE: 2001-02-02  
;; PRIOR APPLICATION NUMBER: US 60/179,991  
;; PRIOR FILING DATE: 2000-02-03  
;; NUMBER OF SEQ ID NOS: 1093  
;; SOFTWARE: FastSeq for windows Version 3.0  
;; SEQ ID NO 91  
;; LENGTH: 18  
;; TYPE: DNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Synthetic Sequence  
US-09-776-479-91

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 21

US-09-954-987B-115  
;; Sequence 115, Application US/09954987B  
;; Publication No. US20030104523A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Stefan Bauer  
;; APPLICANT: Grayson B. Lipford  
;; APPLICANT: Hermann Wagner  
;; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF  
;; FILE REFERENCE: C1041/7016 (AMS)  
;; CURRENT APPLICATION NUMBER: US/09/954,987B  
;; CURRENT FILING DATE: 2001-09-17  
;; PRIOR APPLICATION NUMBER: US 60/233,035  
;; PRIOR FILING DATE: 2000-09-15  
;; PRIOR APPLICATION NUMBER: US 60/263,657  
;; PRIOR FILING DATE: 2001-01-23  
;; PRIOR APPLICATION NUMBER: US 60/291,726  
;; PRIOR FILING DATE: 2001-05-17  
;; PRIOR APPLICATION NUMBER: US 60/300,210  
;; PRIOR FILING DATE: 2001-06-22  
;; NUMBER OF SEQ ID NOS: 230  
;; SOFTWARE: FastSeq for windows Version 3.0  
;; SEQ ID NO 115  
;; LENGTH: 18  
;; TYPE: DNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Synthetic oligonucleotide  
US-09-954-987B-115

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 22

US-09-895-480A-14  
;; Sequence 14, Application US/09895480A  
;; Publication No. US20030129221A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Inex Pharmaceuticals Inc.  
;; TITLE OF INVENTION: High Efficiency Encapsulation of Charged Therapeutic  
;; Agents in  
;; Lipid Vesicles  
;; NUMBER OF SEQUENCES: 17

;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Oppedahl & Larson LLP  
;; STREET: PO Box 5068  
;; CITY: Dillon  
;; STATE: CO  
;; COUNTRY: US  
;; ZIP: 80435

;; COMPUTER READABLE FORM:

;; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb

;; COMPUTER: IBM Compatible

;; OPERATING SYSTEM: DOS 5.0

;; SOFTWARE: Word Perfect

;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/09/895,480A  
;; FILING DATE: 29-Jun-2001

;; CLASSIFICATION: <Unknown>

;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: <Unknown>

;; FILING DATE: <Unknown>

;; ATTORNEY/AGENT INFORMATION:  
;; NAME: <Unknown>

;; REGISTRATION NUMBER: <Unknown>

;; REFERENCE/DOCKET NUMBER: <Unknown>

;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: <Unknown>

;; TELEFAX: <Unknown>

;; TELEEX: <Unknown>

;; INFORMATION FOR SEQ ID NO: 14:

;; SEQUENCE CHARACTERISTICS:

;; LENGTH: 18

;; TYPE: nucleic acid

;; STRANDEDNESS: single

;; TOPOLOGY: linear

;; MOLECULE TYPE: other nucleic acid

;; HYPOTHETICAL: no

;; ANTI-SENSE: yes

;; SEQUENCE DESCRIPTION: SEQ ID NO: 14:

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 23

US-09-967-464-4  
;; Sequence 4, Application US/0967464  
;; Publication No. US20030138453A1  
;; GENERAL INFORMATION:  
;; APPLICANT: O'Hagan, Derek  
;; APPLICANT: Otten, Gillis  
;; APPLICANT: Donnelly, John J.  
;; APPLICANT: Polo, John M.  
;; APPLICANT: Barnett, Susan  
;; APPLICANT: Singh, Mamohan  
;; APPLICANT: Ulmer, Jeffrey  
;; APPLICANT: Dubensky, Jr., Thomas W.  
;; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF HETEROLOGOUS NUCLEIC ACIDS  
;; FILE REFERENCE: PPI6269.004  
;; CURRENT APPLICATION NUMBER: US/09/967,464  
;; CURRENT FILING DATE: 2002-04-11  
;; PRIOR APPLICATION NUMBER: 60/236,105  
;; PRIOR FILING DATE: 2000-09-28  
;; PRIOR APPLICATION NUMBER: 60/315,905  
;; PRIOR FILING DATE: 2001-08-30  
;; NUMBER OF SEQ ID NOS: 68  
;; SOFTWARE: PatentIn version 3.1  
;; SEQ ID NO 4  
;; LENGTH: 18

TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Artificial sequence is synthesized  
US-09-967-464-4

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 24  
US-09-776-479-1  
Sequence 1, Application US/09776479  
Publication No. US20040067902A9  
GENERAL INFORMATION:  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
APPLICANT: Fouton, Yves  
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the  
TITLE OF INVENTION: Treatment of Asthma and Allergy  
FILE REFERENCE: C1037/7013 (HCL/MAT)  
CURRENT APPLICATION NUMBER: US/09/776,479  
CURRENT FILING DATE: 2001-02-02  
PRIOR APPLICATION NUMBER: US 60/179,991  
PRIOR FILING DATE: 2000-02-03  
NUMBER OF SEQ ID NOS: 1093  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 1  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-776-479-1

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 25  
US-09-776-479-54  
Sequence 54, Application US/09776479  
Publication No. US20040067902A9  
GENERAL INFORMATION:  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
APPLICANT: Fouton, Yves  
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the  
TITLE OF INVENTION: Treatment of Asthma and Allergy  
FILE REFERENCE: C1037/7013 (HCL/MAT)  
CURRENT APPLICATION NUMBER: US/09/776,479  
CURRENT FILING DATE: 2001-02-02  
PRIOR APPLICATION NUMBER: US 60/179,991  
PRIOR FILING DATE: 2000-02-03  
NUMBER OF SEQ ID NOS: 1093  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 54  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-776-479-54

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 26  
US-09-776-479-55  
Sequence 55, Application US/09776479  
Publication No. US20040067902A9  
GENERAL INFORMATION:  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
APPLICANT: Fouton, Yves  
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the  
TITLE OF INVENTION: Treatment of Asthma and Allergy  
FILE REFERENCE: C1037/7013 (HCL/MAT)  
CURRENT APPLICATION NUMBER: US/09/776,479  
CURRENT FILING DATE: 2001-02-02  
PRIOR APPLICATION NUMBER: US 60/179,991  
PRIOR FILING DATE: 2000-02-03  
NUMBER OF SEQ ID NOS: 1093  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 55  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-776-479-55

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 27  
US-09-776-479-91  
Sequence 91, Application US/09776479  
Publication No. US20040067902A9  
GENERAL INFORMATION:  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
APPLICANT: Fouton, Yves  
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the  
TITLE OF INVENTION: Treatment of Asthma and Allergy  
FILE REFERENCE: C1037/7013 (HCL/MAT)  
CURRENT APPLICATION NUMBER: US/09/776,479  
CURRENT FILING DATE: 2001-02-02  
PRIOR APPLICATION NUMBER: US 60/179,991  
PRIOR FILING DATE: 2000-02-03  
NUMBER OF SEQ ID NOS: 1093  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 91  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-776-479-91

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | | | | | |  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 28  
US-10-023-909A-51  
; Sequence 51, Application US/10023909A  
; Publication No. US20020164341A1  
; GENERAL INFORMATION:  
; APPLICANT: Davis, Heather L.  
; APPLICANT: Schorr, Joachim  
; APPLICANT: Kriegl, Arthur M.  
; TITLE OF INVENTION: Use of Nucleic Acids Containing  
; FILE REFERENCE: C1039/7058/HCL  
; CURRENT APPLICATION NUMBER: US/10/023, 909A  
; PRIOR FILING DATE: 2001-12-18  
; PRIOR APPLICATION NUMBER: US 09/325,193  
; PRIOR FILING DATE: 1999-06-03  
; PRIOR APPLICATION NUMBER: US 09/154,614  
; PRIOR FILING DATE: 1998-09-16  
; PRIOR APPLICATION NUMBER: PCT/US98/04703  
; PRIOR FILING DATE: 1998-03-10  
; PRIOR APPLICATION NUMBER: US 60/040,376  
; PRIOR FILING DATE: 1997-03-10  
; NUMBER OF SEQ ID NOS: 98  
; SOFTWARE: FaastSeq for Windows Version 3.0  
; SEQ ID NO 51  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
US-10-023-909A-51

Query Match 100.0%; Score 18; DB 5; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | | | | | |  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 29  
US-10-112-653-1  
; Sequence 1, Application US/10112653  
; Publication No. US20030050268A1  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; APPLICANT: Berg, Daniel J.  
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR  
; FILE REFERENCE: C01039/70060(AMS)  
; CURRENT APPLICATION NUMBER: US/10/112,653  
; PRIOR FILING DATE: 2002-03-29  
; PRIOR APPLICATION NUMBER: US 60/279,642  
; NUMBER OF SEQ ID NOS: 1040  
; SOFTWARE: FaastSeq for Windows Version 3.0  
; SEQ ID NO 1  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
US-10-112-653-1

Query Match 100.0%; Score 18; DB 5; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | | | | | |  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 30  
US-10-112-653-85  
; Sequence 85, Application US/10112653  
; Publication No. US20030050268A1  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; APPLICANT: Berg, Daniel J.  
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR  
; FILE REFERENCE: C01039/70060(AMS)  
; CURRENT APPLICATION NUMBER: US/10/112,653  
; PRIOR FILING DATE: 2002-03-29  
; PRIOR APPLICATION NUMBER: US 60/279,642  
; PRIOR FILING DATE: 2001-03-29  
; NUMBER OF SEQ ID NOS: 1040  
; SOFTWARE: FaastSeq for Windows Version 3.0  
; SEQ ID NO 85  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
US-10-112-653-85

Query Match 100.0%; Score 18; DB 5; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | | | | | |  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 31  
US-10-017-995-1  
; Sequence 1, Application US/10017995  
; Publication No. US20030055014A1  
; GENERAL INFORMATION:  
; APPLICANT: Bratzler, Robert L.  
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids  
; FILE REFERENCE: C1037/7025 (HCL/MAT)  
; CURRENT APPLICATION NUMBER: US/10/017,995  
; PRIOR FILING DATE: 2001-12-18  
; PRIOR APPLICATION NUMBER: US 60/255,534  
; PRIOR FILING DATE: 2000-12-14  
; NUMBER OF SEQ ID NOS: 1093  
; SOFTWARE: FaastSeq for Windows Version 3.0  
; SEQ ID NO 1  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Sequence  
US-10-017-995-1

Query Match 100.0%; Score 18; DB 5; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | | | | | |  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 32  
US-10-017-995-54  
; Sequence 54, Application US/10017995  
; Publication No. US20030055014A1

```
/ GENERAL INFORMATION:
/ APPLICANT: Bratzler, Robert L.
/ TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
/ FILE REFERENCE: C1037/7025 (HCL/MAT)
/ CURRENT APPLICATION NUMBER: US/10/017,995
/ PRIOR FILING DATE: 2001-12-18
/ PRIOR APPLICATION NUMBER: US 60/255,534
/ NUMBER OF SEQ ID NOS: 1093
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 54
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Sequence
US-10-017-995-54

Query Match          100.0%; Score 18; DB 5; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGTGGCCCAT 18

RESULT 33
US-10-017-995-55
/ Sequence 55, Application US/10017995
/ Publication No. US20030055014A1
/ GENERAL INFORMATION:
/ APPLICANT: Bratzler, Robert L.
/ TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
/ FILE REFERENCE: C1037/7025 (HCL/MAT)
/ CURRENT APPLICATION NUMBER: US/10/017,995
/ PRIOR FILING DATE: 2001-12-18
/ PRIOR APPLICATION NUMBER: US 60/255,534
/ NUMBER OF SEQ ID NOS: 1093
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 55
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Sequence
US-10-017-995-55

Query Match          100.0%; Score 18; DB 5; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGTGGCCCAT 18

RESULT 34
US-10-017-995-91
/ Sequence 91, Application US/10017995
/ Publication No. US20030055014A1
/ GENERAL INFORMATION:
/ APPLICANT: Bratzler, Robert L.
/ TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
/ FILE REFERENCE: C1037/7025 (HCL/MAT)
/ CURRENT APPLICATION NUMBER: US/10/017,995
/ PRIOR FILING DATE: 2001-12-18
/ PRIOR APPLICATION NUMBER: US 60/255,534
/ NUMBER OF SEQ ID NOS: 1093
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 91
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/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Sequence
US-10-017-995-91

Query Match          100.0%; Score 18; DB 5; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGTGGCCCAT 18

RESULT 35
US-10-002-884A-6
/ Sequence 6, Application US/10002884A
/ Publication No. US20030087810A1
/ GENERAL INFORMATION:
/ APPLICANT: Stein, Cy A
/ APPLICANT: Beninetskaya, Lyuba
/ APPLICANT: Guzzo-Petrelli, Nancy
/ TITLE OF INVENTION: PEPTIDES THAT COMPLEX WITH ANTISENSE OLIGONUCLEOTIDES WHICH DOWNR
/ FILE REFERENCE: 0575/63293
/ CURRENT APPLICATION NUMBER: US/10/002,884A
/ PRIOR FILING DATE: 2001-11-02
/ NUMBER OF SEQ ID NOS: 9
/ SOFTWARE: Patentin version 3.1
/ SEQ ID NO 6
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: ARTIFICIAL SEQUENCE
/ FEATURE:
/ OTHER INFORMATION: ANTISENSE OLIGONUCLEOTIDE
US-10-002-884A-6

Query Match          100.0%; Score 18; DB 5; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
Db      1 TCTCCAGCGTGGCCCAT 18

RESULT 36
US-10-300-247-51
/ Sequence 51, Application US/10300247
/ Publication No. US20030091599A1
/ GENERAL INFORMATION:
/ APPLICANT: Davis, Heather L.
/ APPLICANT: Schorr, Joachim
/ APPLICANT: Kries, Arthur M.
/ TITLE OF INVENTION: Use of Nucleic Acids Containing
/ FILE REFERENCE: C1039/7058/HCL
/ CURRENT APPLICATION NUMBER: US/10/300,247
/ PRIOR FILING DATE: 2002-11-20
/ PRIOR APPLICATION NUMBER: US 09/325,193
/ PRIOR FILING DATE: 1999-06-03
/ PRIOR APPLICATION NUMBER: US 09/154,614
/ PRIOR FILING DATE: 1998-09-16
/ PRIOR APPLICATION NUMBER: PCT/US98/04703
/ PRIOR FILING DATE: 1998-03-10
/ PRIOR APPLICATION NUMBER: US 60/040,376
/ PRIOR FILING DATE: 1997-03-10
/ NUMBER OF SEQ ID NOS: 98
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 51
/ LENGTH: 18
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/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Oligonucleotide
US-10-300-247-51

Query Match          100.0%; Score 18; DB 5; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
DB 1 TCTCCAGCGTGGCCCAT 18

RESULT 37
US-10-161-229-53
/ Sequence 53, Application US/10161229
/ Publication No. US20030100527A1
/ GENERAL INFORMATION:
/ APPLICANT: Krieg, Arthur M.
/ TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules for
/ FILE REFERENCE: C01039/70061
/ CURRENT APPLICATION NUMBER: US/10/161,229
/ PRIOR FILING DATE: 2002-06-03
/ PRIOR APPLICATION NUMBER: US 08/191,170
/ PRIOR FILING DATE: 1998-11-13
/ PRIOR APPLICATION NUMBER: US 08/960,774
/ PRIOR FILING DATE: 1997-10-30
/ PRIOR APPLICATION NUMBER: US 08/738,652
/ PRIOR FILING DATE: 1996-10-30
/ PRIOR APPLICATION NUMBER: US 08/386,063
/ PRIOR FILING DATE: 1995-02-07
/ PRIOR APPLICATION NUMBER: US 08/276,358
/ PRIOR FILING DATE: 1994-07-15
/ NUMBER OF SEQ ID NOS: 99
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 53
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Oligonucleotide
US-10-161-229-53

Query Match          100.0%; Score 18; DB 5; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
DB 1 TCTCCAGCGTGGCCCAT 18

RESULT 38
US-10-142-566-45
/ Sequence 45, Application US/10142566
/ Publication No. US20030119016A1
/ GENERAL INFORMATION:
/ APPLICANT: Riley, Timothy A.
/ APPLICANT: Brown, Bob D.
/ APPLICANT: Arnold, Lyle J.
/ TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES WITH INCREASED RNASE SENSITIVITY
/ FILE REFERENCE: 003BIO.003V1
/ CURRENT APPLICATION NUMBER: US/10/142,566
/ PRIOR FILING DATE: 2002-08-06
/ PRIOR APPLICATION NUMBER: US 09/136,080
/ PRIOR FILING DATE: 1998-08-18
/ NUMBER OF SEQ ID NOS: 54
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 45
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```
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: synthetic oligonucleotide
US-10-142-566-45

Query Match          100.0%; Score 18; DB 5; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
DB 1 TCTCCAGCGTGGCCCAT 18

RESULT 39
US-10-290-545-9
/ Sequence 9, Application US/10290545
/ Publication No. US20030125292A1
/ GENERAL INFORMATION:
/ APPLICANT: Semple, Sean
/ APPLICANT: Klimuk, Sandy
/ APPLICANT: Yuan, Zuan-Ning
/ TITLE OF INVENTION: Improved Mucosal Vaccines and Methods for Using the Same
/ FILE REFERENCE: A-71854/TAL/AXG
/ CURRENT APPLICATION NUMBER: US/10/290,545
/ PRIOR FILING DATE: 2002-11-07
/ NUMBER OF SEQ ID NOS: 30
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 9
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-10-290-545-9

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
DB 1 TCTCCAGCGTGGCCCAT 18

RESULT 40
US-10-290-545-24
/ Sequence 24, Application US/10290545
/ Publication No. US20030125292A1
/ GENERAL INFORMATION:
/ APPLICANT: Semple, Sean
/ APPLICANT: Klimuk, Sandy
/ APPLICANT: Yuan, Zuan-Ning
/ TITLE OF INVENTION: Improved Mucosal Vaccines and Methods for Using the Same
/ FILE REFERENCE: A-71854/TAL/AXG
/ CURRENT APPLICATION NUMBER: US/10/290,545
/ PRIOR FILING DATE: 2002-11-07
/ NUMBER OF SEQ ID NOS: 30
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 24
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-10-290-545-24

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18
DB 1 TCTCCAGCGTGGCCCAT 18
```

```
RESULT 41
US-10-262-318-6
; Sequence 6, Application US/10262318
; Publication No. US20030144198A1
; GENERAL INFORMATION:
; APPLICANT: Copharos
; APPLICANT: Collins, Douglas A.
; TITLE OF INVENTION: COMBINATION OF TRANSPORT PROTEINS WITH CONJUGATED COBALAMIN T
; FILE REFERENCE: COP1012
; CURRENT APPLICATION NUMBER: US/10/262,318
; CURRENT FILING DATE: 2002-09-30
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 18
; TYPE: DNA
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: oligonucleotide-- G3139 Genta
US-10-262-318-6

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 42
US-10-224-523-40
; Sequence 40, Application US/10224523
; Publication No. US20030148976A1
; GENERAL INFORMATION:
; APPLICANT: Kriegl, Arthur
; APPLICANT: Volmer, Jorg
; APPLICANT: Uhlmann, Eugen
; TITLE OF INVENTION: Combination Motif Immune Stimulatory Oligonucleotides with Improv
; FILE REFERENCE: C01039/70063 (HCL/AWS)
; CURRENT APPLICATION NUMBER: US/10/224,523
; CURRENT FILING DATE: 2002-08-19
; PRIOR APPLICATION NUMBER: US 60/313,273
; PRIOR FILING DATE: 2001-08-17
; PRIOR APPLICATION NUMBER: US 60/393,952
; PRIOR FILING DATE: 2002-07-03
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 40
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-224-523-40

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 43
US-10-379-164-2
; Sequence 2, Application US/10379164
; Publication No. US20030161834A1
; GENERAL INFORMATION:
```

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; APPLICANT: Friede, Martin
; APPLICANT: Garcon, Nathalie
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Hermand, Philippe
; TITLE OF INVENTION: Vaccines
; FILE REFERENCE: B45181-1D1
; CURRENT APPLICATION NUMBER: US/10/379,164
; CURRENT FILING DATE: 2003-03-03
; PRIOR APPLICATION NUMBER: 09/690,921
; PRIOR FILING DATE: 2000-10-18
; PRIOR APPLICATION NUMBER: PCT/EP00/02920
; PRIOR FILING DATE: 2000-04-04
; PRIOR APPLICATION NUMBER: 09/301,829
; PRIOR FILING DATE: 1999-04-29
; PRIOR APPLICATION NUMBER: GB 9908885.8
; PRIOR FILING DATE: 1999-04-19
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapien
US-10-379-164-2

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 44
US-10-187-264A-45
; Sequence 45, Application US/10187264A
; Publication No. US20030162734A1
; GENERAL INFORMATION:
; APPLICANT: Kriegl, Arthur M.
; APPLICANT: Kliman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/187,264A
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-187-264A-45

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18
Db 1 TCTCCAGCGTGGCCAT 18
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RESULT 45  
US-10-265-072-112  
; Sequence 112, Application US/10265072  
; Publication No. US20030166001A1  
; GENERAL INFORMATION:  
; APPLICANT: Lidfors, Grayson  
; TITLE OF INVENTION: TOLL-LIKE RECEPTOR 3 SIGNALING AGONISTS AND ANTAGONISTS  
; FILE REFERENCE: C01041.70031.US  
; CURRENT APPLICATION NUMBER: US/10/265,072  
; CURRENT FILING DATE: 2002-10-05  
; NUMBER OF SEQ ID NOS: 117  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 112  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide  
US-10-265-072-112

Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 46  
US-10-365-623-15  
; Sequence 15, Application US/10365623  
; Publication No. US20030166512A1  
; GENERAL INFORMATION:  
; APPLICANT: Xie, Dong  
; TITLE OF INVENTION: Protein Carrier System for Therapeutic Oligonucleotides  
; FILE REFERENCE: 63024.000001  
; CURRENT APPLICATION NUMBER: US/10/365,623  
; CURRENT FILING DATE: 2003-02-13  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 15  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense oligonucleotide directed against human bcl-2  
US-10-365-623-15

Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 47  
US-10-142-666-9  
; Sequence 9, Application US/10142666  
; Publication No. US20030171315A1  
; GENERAL INFORMATION:  
; APPLICANT: Brown, Bob D.  
; APPLICANT: Riley, Timothy A.  
; TITLE OF INVENTION: OLIGONUCLEOTIDE PROBES AND PRIMERS  
; FILE REFERENCE: OASBIO.016A  
; CURRENT APPLICATION NUMBER: US/10/142,666  
; CURRENT FILING DATE: 2002-08-29  
; PRIOR APPLICATION NUMBER: 60/306,229

PRIOR FILING DATE: 2001-07-18  
; PRIOR APPLICATION NUMBER: 09/136,080  
; PRIOR FILING DATE: 1998-08-18  
; PRIOR APPLICATION NUMBER: 60/060,673  
; PRIOR FILING DATE: 1997-10-02  
; NUMBER OF SEQ ID NOS: 88  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 9  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Artificial oligonucleotide  
US-10-142-666-9

Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 48  
US-10-053-645A-17  
; Sequence 17, Application US/10053645A  
; Publication No. US20030176376A1  
; GENERAL INFORMATION:  
; APPLICANT: Robert E. Klem  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING A  
; TITLE OF INVENTION: CELL-PROLIFERATIVE DISORDER USING CRE DECOY OLIGOMERS, BCL-2  
; FILE REFERENCE: 10412-022-999  
; CURRENT APPLICATION NUMBER: US/10/053,645A  
; CURRENT FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 60/263,244  
; PRIOR FILING DATE: 2001-01-22  
; NUMBER OF SEQ ID NOS: 43  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 17  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Description of artificial sequence: Synthetic Antisense  
US-10-053-645A-17

Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 49  
US-10-053-645A-24  
; Sequence 24, Application US/10053645A  
; Publication No. US20030176376A1  
; GENERAL INFORMATION:  
; APPLICANT: Robert E. Klem  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING A  
; TITLE OF INVENTION: CELL-PROLIFERATIVE DISORDER USING CRE DECOY OLIGOMERS, BCL-2  
; FILE REFERENCE: 10412-022-999  
; CURRENT APPLICATION NUMBER: US/10/053,645A  
; CURRENT FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 60/263,244  
; PRIOR FILING DATE: 2001-01-22  
; NUMBER OF SEQ ID NOS: 43

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; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence: Synthetic Antisense
US-10-053-645A-24

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCAT 18
        |||
Db       1 TCTCCAGCGTGGCCAT 18

RESULT 50
US-10-140-013-1
; Sequence 1, Application US/10140013
; Publication No. US20030181406A1
; GENERAL INFORMATION:
; APPLICANT: Christian Schetter
; APPLICANT: Jorg Vollmer
; TITLE OF INVENTION: CPG-LIKE NUCLEIC ACIDS AND METHODS OF
; TITLE OF INVENTION: USE THEREOF
; FILE REFERENCE: C01041/70019 (AWS)
; CURRENT APPLICATION NUMBER: US/10/140,013
; CURRENT FILING DATE: 2002-05-06
; PRIOR APPLICATION NUMBER: US 60/254,341
; PRIOR FILING DATE: 2000-12-08
; PRIOR APPLICATION NUMBER: PCT/US01/48281
; PRIOR FILING DATE: 2001-12-10
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-140-013-1

Query Match          100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCAT 18
        |||
Db       1 TCTCCAGCGTGGCCAT 18
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Search completed: February 17, 2006, 20:15:00  
Job time : 816 secs



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OM nucleic - nucleic search, using sw model

Run on: February 17, 2006, 20:01:36 ; Search time 495 Seconds  
(without alignments)  
77.190 Million cell updates/sec

Title: US-10-822-205-1

Perfect score: 18

Sequence: 1 tctccacgctgcgcacat 18

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

Searched: 7204252 seqs, 1061369211 residues

Total number of hits satisfying chosen parameters: 11505972

Minimum DB seq length: 0  
Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Listing first 1000 summaries

Database : Published Applications NA.New:\*  
1: /cgn2\_6/ptodata/1/pubpna/US08\_NEW\_PUB.seq:\*  
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3: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*  
4: /cgn2\_6/ptodata/1/pubpna/PT\_NEW\_PUB.seq:\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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1	18	100.0	18	7	US-10-994-213-7
2	18	100.0	18	8	US-10-918-638-24
3	18	100.0	18	8	US-10-658-947-14
4	18	100.0	18	8	US-10-469-561-6
5	18	100.0	18	8	US-10-619-279-45
6	18	100.0	18	8	US-10-435-656-55
7	18	100.0	18	12	US-11-127-654-1
8	18	100.0	18	12	US-11-127-654-85
9	18	100.0	18	12	US-11-081-140-6
10	18	100.0	18	12	US-11-134-918-55
11	18	100.0	18	12	US-11-031-460-55
12	18	100.0	18	12	US-11-067-587-55
13	18	100.0	18	12	US-11-099-683-131
14	18	100.0	18	12	US-11-099-683-132
15	18	100.0	18	7	US-10-994-213-8
16	18	100.0	18	7	US-10-994-213-9
17	18	100.0	20	12	US-11-127-654-81
18	18	100.0	23	7	US-10-994-213-1
19	18	100.0	23	7	US-10-994-213-2
20	18	100.0	30	12	US-11-201-322-2
21	16.4	91.1	18	8	US-10-619-279-72
22	16.4	91.1	18	12	US-11-127-654-72
23	16.4	91.1	18	12	US-11-127-654-73
24	16.4	91.1	18	12	US-11-127-654-733
25	16.4	91.1	20	12	US-11-127-654-102
26	16.4	91.1	20	12	US-11-127-654-102
27	16.4	91.1	20	12	US-11-127-654-104
28	16.4	91.1	20	12	US-11-127-654-105
29	16.4	91.1	20	12	US-10-497-591A-40
30	14.8	88.9	18	12	US-11-099-683-133
31	14.8	88.9	18	12	US-11-127-654-395
32	14.8	88.9	18	12	US-11-127-654-396
33	14.4	80.0	20	12	US-11-127-654-101
34	14.4	80.0	20	12	US-10-310-914A-123133
35	14	77.8	16	12	US-11-127-654-84
36	14	77.8	16	12	US-11-127-654-394
37	14	77.8	22	12	US-10-310-914A-737406
38	14	77.8	22	12	US-11-127-654-70
39	14	77.8	24	12	US-10-310-914A-737407
40	13.8	76.7	21	8	US-10-310-914A-123135
41	13.8	76.7	21	8	US-10-310-914A-123135
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43	13.4	74.4	17	8	US-11-121-849-517192
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C 262	11.6	64.4	25	12	US-11-136-527-229094	Sequence 229094,
C 263	11.6	64.4	26	8	US-10-310-914A-1074805	Sequence 1074805,
C 264	11.6	64.4	30	8	US-10-857-780-1064	Sequence 1064, Ap
C 265	11.4	63.3	17	8	US-10-497-591A-53	Sequence 53, Ap1
C 266	11.4	63.3	18	8	US-10-310-914A-352025	Sequence 352025,
C 267	11.4	63.3	18	8	US-10-310-914A-1128636	Sequence 1128636,
C 268	11.4	63.3	18	8	US-10-310-914A-1128637	Sequence 1128637,
C 269	11.4	63.3	18	8	US-10-310-914A-1128638	Sequence 1128638,
C 270	11.4	63.3	18	8	US-10-310-914A-1128639	Sequence 1128639,
C 271	11.4	63.3	18	8	US-10-310-914A-1128640	Sequence 1128640,
C 272	11.4	63.3	18	8	US-10-310-914A-1128641	Sequence 1128641,
C 273	11.4	63.3	18	8	US-10-310-914A-1128642	Sequence 1128642,
C 274	11.4	63.3	18	8	US-10-310-914A-1128643	Sequence 1128643,
C 275	11.4	63.3	19	8	US-10-310-914A-378375	Sequence 378375,
C 276	11.4	63.3	19	8	US-10-310-914A-443158	Sequence 443158,
C 277	11.4	63.3	19	8	US-10-310-914A-472746	Sequence 472746,
C 278	11.4	63.3	19	8	US-10-310-914A-472747	Sequence 472747,
C 279	11.4	63.3	19	8	US-10-310-914A-755790	Sequence 755790,
C 280	11.4	63.3	19	8	US-10-310-914A-903442	Sequence 903442,
C 281	11.4	63.3	19	8	US-10-310-914A-939245	Sequence 939245,
C 282	11.4	63.3	19	8	US-10-310-914A-1126478	Sequence 1126478,
C 283	11.4	63.3	19	8	US-10-310-914A-1128644	Sequence 1128644,
C 284	11.4	63.3	19	8	US-10-310-914A-1128645	Sequence 1128645,
C 285	11.4	63.3	19	8	US-10-310-914A-1128646	Sequence 1128646,
C 286	11.4	63.3	19	8	US-10-310-914A-1128647	Sequence 1128647,
C 287	11.4	63.3	19	8	US-10-310-914A-1205155	Sequence 1205155,
C 288	11.4	63.3	19	10	US-11-101-244-475135	Sequence 475135,
C 289	11.4	63.3	19	10	US-11-101-244-519483	Sequence 519483,
C 290	11.4	63.3	19	10	US-11-101-244-1089882	Sequence 1089882,
C 291	11.4	63.3	19	11	US-11-083-784-475135	Sequence 475135,
C 292	11.4	63.3	19	11	US-11-083-784-519483	Sequence 519483,
C 293	11.4	63.3	19	11	US-11-083-784-1089882	Sequence 1089882,
C 294	11.4	63.3	20	8	US-10-310-914A-494841	Sequence 494841,
C 295	11.4	63.3	20	8	US-10-310-914A-994889	Sequence 994889,
C 296	11.4	63.3	20	8	US-10-310-914A-1080649	Sequence 1080649,
C 297	11.4	63.3	20	8	US-10-310-914A-1306601	Sequence 1306601,
C 298	11.4	63.3	21	8	US-10-310-914A-556226	Sequence 556226,
C 299	11.4	63.3	21	8	US-10-310-914A-843486	Sequence 843486,
C 300	11.4	63.3	21	8	US-10-310-914A-1086338	Sequence 1086338,
C 301	11.4	63.3	22	8	US-10-310-914A-128683	Sequence 128683,
C 302	11.4	63.3	22	8	US-10-310-914A-348328	Sequence 348328,
C 303	11.4	63.3	22	8	US-10-310-914A-472760	Sequence 472760,
C 304	11.4	63.3	22	8	US-10-310-914A-524245	Sequence 524245,
C 305	11.4	63.3	22	8	US-10-310-914A-1088736	Sequence 1088736,
C 306	11.4	63.3	22	8	US-10-310-914A-1135236	Sequence 1135236,
C 307	11.4	63.3	22	8	US-10-310-914A-1136128	Sequence 1136128,
C 308	11.4	63.3	22	8	US-10-310-914A-1136912	Sequence 1136912,
C 309	11.4	63.3	23	8	US-10-310-914A-470977	Sequence 470977,
C 310	11.4	63.3	23	8	US-10-310-914A-831112	Sequence 831112,
C 311	11.4	63.3	23	8	US-10-310-914A-1174463	Sequence 1174463,
C 312	11.4	63.3	23	8	US-10-310-914A-1246216	Sequence 1246216,
C 313	11.4	63.3	23	8	US-10-310-914A-1247075	Sequence 1247075,
C 314	11.4	63.3	24	8	US-10-310-914A-221556	Sequence 221556,
C 315	11.4	63.3	24	8	US-10-310-914A-221599	Sequence 221599,
C 316	11.4	63.3	24	8	US-10-310-914A-470978	Sequence 470978,
C 317	11.4	63.3	24	8	US-10-310-914A-524246	Sequence 524246,
C 318	11.4	63.3	24	8	US-10-310-914A-877381	Sequence 877381,
C 319	11.4	63.3	24	8	US-10-310-914A-1135237	Sequence 1135237,
C 320	11.4	63.3	24	8	US-10-310-914A-1135726	Sequence 1135726,
C 321	11.4	63.3	24	8	US-10-310-914A-1136129	Sequence 1136129,
C 322	11.4	63.3	24	8	US-10-310-914A-1136913	Sequence 1136913,
C 323	11.4	63.3	24	8	US-10-310-914A-1205156	Sequence 1205156,
C 324	11.4	63.3	24	8	US-10-310-914A-1320864	Sequence 1320864,
C 325	11.4	63.3	25	12	US-11-121-849-7267	Sequence 7267, Ap
C 326	11.4	63.3	25	12	US-11-121-849-84163	Sequence 84163, A
C 327	11.4	63.3	25	12	US-11-121-849-202951	Sequence 202951,
C 328	11.4	63.3	25	12	US-11-121-849-203571	Sequence 203571,
C 329	11.4	63.3	25	12	US-11-121-849-276806	Sequence 276806,
C 330	11.4	63.3	25	12	US-11-121-849-312065	Sequence 312065,
C 331	11.4	63.3	25	12	US-11-121-849-338017	Sequence 338017,
C 332	11.4	63.3	25	12	US-11-121-849-518048	Sequence 518048,
C 333	11.4	63.3	25	12	US-11-121-849-527657	Sequence 527657,
C 334	11.4	63.3	25	12	US-11-121-849-530197	Sequence 530197,
C 335	11.4	63.3	25	12	US-11-121-849-531000	Sequence 531000,
C 336	11.4	63.3	25	12	US-11-136-527-229251	Sequence 229251,
C 337	11.4	63.3	25	12	US-11-136-527-337890	Sequence 337890,
C 338	11.4	63.3	26	8	US-10-310-914A-402369	Sequence 402369,
C 339	11.4	63.3	26	8	US-10-310-914A-124138	Sequence 124138,
C 340	11.4	63.3	26	8	US-10-310-914A-142138	Sequence 142138,
C 341	11.2	62.2	18	8	US-10-310-914A-173078	Sequence 173078,
C 342	11.2	62.2	18	8	US-10-310-914A-975683	Sequence 975683,
C 343	11.2	62.2	18	8	US-10-310-914A-1103916	Sequence 1103916,
C 344	11.2	62.2	18	8	US-10-310-914A-161839	Sequence 161839,
C 345	11.2	62.2	19	8	US-10-310-914A-161840	Sequence 161840,
C 346	11.2	62.2	19	8	US-10-310-914A-191769	Sequence 191769,
C 347	11.2	62.2	19	8	US-10-310-914A-322556	Sequence 322556,
C 348	11.2	62.2	19	8	US-10-310-914A-498723	Sequence 498723,
C 349	11.2	62.2	19	8	US-10-310-914A-550898	Sequence 550898,
C 350	11.2	62.2	19	8	US-10-310-914A-550899	Sequence 550899,
C 351	11.2	62.2	19	8	US-10-310-914A-723735	Sequence 723735,
C 352	11.2	62.2	19	8	US-10-310-914A-723735	Sequence 723735,
C 353	11.2	62.2	19	8	US-10-310-914A-810381	Sequence 810381,
C 354	11.2	62.2	19	8	US-10-310-914A-1310597	Sequence 1310597,
C 355	11.2	62.2	19	8	US-10-310-914A-1377335	Sequence 1377335,
C 356	11.2	62.2	19	10	US-11-101-244-24234	Sequence 24234, A
C 357	11.2	62.2	19	10	US-11-101-244-24313	Sequence 24313, A
C 358	11.2	62.2	19	10	US-11-101-244-24401	Sequence 24401, A
C 359	11.2	62.2	19	10	US-11-101-244-24486	Sequence 24486, A
C 360	11.2	62.2	19	10	US-11-101-244-24571	Sequence 24571, A
C 361	11.2	62.2	19	10	US-11-101-244-24652	Sequence 24652, A
C 362	11.2	62.2	19	10	US-11-101-244-24732	Sequence 24732, A
C 363	11.2	62.2	19	10	US-11-101-244-24811	Sequence 24811, A
C 364	11.2	62.2	19	10	US-11-101-244-24888	Sequence 24888, A
C 365	11.2	62.2	19	10	US-11-101-244-24964	Sequence 24964, A
C 366	11.2	62.2	19	10	US-11-101-244-24964	Sequence 24964, A
C 367	11.2	62.2	19	10	US-11-101-244-245861	Sequence 245861,
C 368	11.2	62.2	19	10	US-11-101-244-245928	Sequence 245928,
C 369	11.2	62.2	19	10	US-11-101-244-418825	Sequence 418825,
C 370	11.2	62.2	19	10	US-11-101-244-61652	Sequence 61652,
C 371	11.2	62.2	19	10	US-11-101-244-809096	Sequence 809096,
C 372	11.2	62.2	19	10	US-11-101-244-809196	Sequence 809196,
C 373	11.2	62.2	19	10	US-11-101-244-968094	Sequence 968094,
C 374	11.2	62.2	19	10	US-11-101-244-1049659	Sequence 1049659,
C 375	11.2	62.2	19	10	US-11-101-244-1070830	Sequence 1070830,
C 376	11.2	62.2	19	10	US-11-101-244-1169038	Sequence 1169038,
C 377	11.2	62.2	19	10	US-11-101-244-1189601	Sequence 1189601,
C 378	11.2	62.2	19	10	US-11-101-244-1260431	Sequence 1260431,
C 379	11.2	62.2	19	10	US-11-101-244-1367236	Sequence 1367236,
C 380	11.2	62.2	19	10	US-11-101-244-1387244	Sequence 1387244,
C 381	11.2	62.2	19	10	US-11-101-244-1439661	Sequence 1439661,
C 382	11.2	62.2	19	10	US-11-101-244-1585517	Sequence 1585517,
C 383	11.2	62.2	19	10	US-11-101-244-24234	Sequence 24234, A
C 384	11.2	62.2	19	11	US-11-083-784-24313	Sequence 24313, A
C 385	11.2	62.2	19	11	US-11-083-784-24401	Sequence 24401, A

C 386	11.2	62.2	19	11	US-11-083-784-24486	Sequence 24486, A	C 459	11.2	62.2	22	8	US-10-310-914A-1165026	Sequence 1165026,
C 387	11.2	62.2	19	11	US-11-083-784-24571	Sequence 24571, A	C 460	11.2	62.2	22	8	US-10-310-914A-1377426	Sequence 1377426,
C 388	11.2	62.2	19	11	US-11-083-784-24552	Sequence 24552, A	C 461	11.2	62.2	23	8	US-10-310-914A-180711	Sequence 180711,
C 389	11.2	62.2	19	11	US-11-083-784-24732	Sequence 24732, A	C 462	11.2	62.2	23	8	US-10-310-914A-180715	Sequence 180715,
C 390	11.2	62.2	19	11	US-11-083-784-24811	Sequence 24811, A	C 463	11.2	62.2	23	8	US-10-310-914A-1802279	Sequence 1802279,
C 391	11.2	62.2	19	11	US-11-083-784-24888	Sequence 24888, A	C 464	11.2	62.2	23	8	US-10-310-914A-321467	Sequence 321467,
C 392	11.2	62.2	19	11	US-11-083-784-24964	Sequence 24964, A	C 465	11.2	62.2	23	8	US-10-310-914A-648205	Sequence 648205,
C 393	11.2	62.2	19	11	US-11-083-784-249861	Sequence 249861, A	C 466	11.2	62.2	23	8	US-10-310-914A-688436	Sequence 688436,
C 394	11.2	62.2	19	11	US-11-083-784-245928	Sequence 245928, A	C 467	11.2	62.2	23	8	US-10-310-914A-908294	Sequence 908294,
C 395	11.2	62.2	19	11	US-11-083-784-418825	Sequence 418825, A	C 468	11.2	62.2	23	8	US-10-310-914A-913416	Sequence 913416,
C 396	11.2	62.2	19	11	US-11-083-784-651652	Sequence 651652, A	C 469	11.2	62.2	23	8	US-10-310-914A-969019	Sequence 969019,
C 397	11.2	62.2	19	11	US-11-083-784-809096	Sequence 809096, A	C 470	11.2	62.2	23	8	US-10-310-914A-1056781	Sequence 1056781,
C 398	11.2	62.2	19	11	US-11-083-784-809196	Sequence 809196, A	C 471	11.2	62.2	23	8	US-10-310-914A-1372275	Sequence 1372275,
C 399	11.2	62.2	19	11	US-11-083-784-988094	Sequence 988094, A	C 472	11.2	62.2	24	8	US-10-310-914A-62136	Sequence 62136, A
C 400	11.2	62.2	19	11	US-11-083-784-1049699	Sequence 1049699, A	C 473	11.2	62.2	24	8	US-10-310-914A-62148	Sequence 62148, A
C 401	11.2	62.2	19	11	US-11-083-784-1070830	Sequence 1070830, A	C 474	11.2	62.2	24	8	US-10-310-914A-78640	Sequence 78640, A
C 402	11.2	62.2	19	11	US-11-083-784-1169038	Sequence 1169038, A	C 475	11.2	62.2	24	8	US-10-310-914A-124163	Sequence 124163,
C 403	11.2	62.2	19	11	US-11-083-784-1189601	Sequence 1189601, A	C 476	11.2	62.2	24	8	US-10-310-914A-293613	Sequence 293613,
C 404	11.2	62.2	19	11	US-11-083-784-1204031	Sequence 1204031, A	C 477	11.2	62.2	24	8	US-10-310-914A-293616	Sequence 293616,
C 405	11.2	62.2	19	11	US-11-083-784-1367236	Sequence 1367236, A	C 478	11.2	62.2	24	8	US-10-310-914A-293640	Sequence 293640,
C 406	11.2	62.2	19	11	US-11-083-784-1367256	Sequence 1367256, A	C 479	11.2	62.2	24	8	US-10-310-914A-322618	Sequence 322618,
C 407	11.2	62.2	19	11	US-11-083-784-1387244	Sequence 1387244, A	C 480	11.2	62.2	24	8	US-10-310-914A-447605	Sequence 447605,
C 408	11.2	62.2	19	11	US-11-083-784-1390601	Sequence 1390601, A	C 481	11.2	62.2	24	8	US-10-310-914A-578311	Sequence 578311,
C 409	11.2	62.2	19	11	US-11-083-784-1585517	Sequence 1585517, A	C 482	11.2	62.2	24	8	US-10-310-914A-627213	Sequence 627213,
C 410	11.2	62.2	20	8	US-10-310-914A-208292	Sequence 208292, A	C 483	11.2	62.2	24	8	US-10-310-914A-627217	Sequence 627217,
C 411	11.2	62.2	20	8	US-10-310-914A-332864	Sequence 332864, A	C 484	11.2	62.2	24	8	US-10-310-914A-672937	Sequence 672937,
C 412	11.2	62.2	20	8	US-10-310-914A-353383	Sequence 353383, A	C 485	11.2	62.2	24	8	US-10-310-914A-675846	Sequence 675846,
C 413	11.2	62.2	20	8	US-10-310-914A-559051	Sequence 559051, A	C 486	11.2	62.2	24	8	US-10-310-914A-797596	Sequence 797596,
C 414	11.2	62.2	20	8	US-10-310-914A-733251	Sequence 733251, A	C 487	11.2	62.2	24	8	US-10-310-914A-797639	Sequence 797639,
C 415	11.2	62.2	20	8	US-10-310-914A-1047608	Sequence 1047608, A	C 488	11.2	62.2	24	8	US-10-310-914A-976264	Sequence 976264,
C 416	11.2	62.2	20	8	US-10-310-914A-1109245	Sequence 1109245, A	C 489	11.2	62.2	24	8	US-10-310-914A-977762	Sequence 977762,
C 417	11.2	62.2	20	8	US-10-310-914A-1165014	Sequence 1165014, A	C 490	11.2	62.2	24	8	US-10-310-914A-977792	Sequence 977792,
C 418	11.2	62.2	20	8	US-10-310-914A-1374948	Sequence 1374948, A	C 491	11.2	62.2	24	8	US-10-310-914A-977991	Sequence 977991,
C 419	11.2	62.2	20	8	US-10-310-914A-1332151	Sequence 1332151, A	C 492	11.2	62.2	24	8	US-10-310-914A-1166003	Sequence 1166003,
C 420	11.2	62.2	20	8	US-10-310-914A-133645	Sequence 133645, A	C 493	11.2	62.2	25	8	US-10-775-169-5174	Sequence 5174, Ap
C 421	11.2	62.2	20	11	US-11-038-284-9	Sequence 9, Appl	C 494	11.2	62.2	25	8	US-10-775-169-5175	Sequence 5175, Ap
C 422	11.2	62.2	20	12	US-11-069-908-942	Sequence 942, App	C 495	11.2	62.2	25	8	US-10-775-169-5176	Sequence 5176, Ap
C 423	11.2	62.2	20	12	US-11-069-908-3308	Sequence 3308, Ap	C 496	11.2	62.2	25	8	US-10-775-169-5177	Sequence 5177, Ap
C 424	11.2	62.2	21	8	US-10-310-914A-46046	Sequence 46046, A	C 497	11.2	62.2	25	8	US-10-310-914A-519051	Sequence 519051,
C 425	11.2	62.2	21	8	US-10-310-914A-154175	Sequence 154175, A	C 498	11.2	62.2	25	8	US-10-310-914A-262247	Sequence 262247,
C 426	11.2	62.2	21	8	US-10-310-914A-208297	Sequence 208297, A	C 499	11.2	62.2	25	8	US-10-310-914A-550993	Sequence 550993,
C 427	11.2	62.2	21	8	US-10-310-914A-279891	Sequence 279891, A	C 500	11.2	62.2	25	8	US-10-310-914A-627187	Sequence 627187,
C 428	11.2	62.2	21	8	US-10-310-914A-293638	Sequence 293638, A	C 501	11.2	62.2	25	8	US-10-310-914A-977992	Sequence 977992,
C 429	11.2	62.2	21	8	US-10-310-914A-322616	Sequence 322616, A	C 502	11.2	62.2	25	8	US-10-310-914A-977992	Sequence 977992,
C 430	11.2	62.2	21	8	US-10-310-914A-507151	Sequence 507151, A	C 503	11.2	62.2	25	8	US-10-310-914A-1087055	Sequence 1087055,
C 431	11.2	62.2	21	8	US-10-310-914A-513611	Sequence 513611, A	C 504	11.2	62.2	25	8	US-10-310-914A-1165010	Sequence 1165010,
C 432	11.2	62.2	21	8	US-10-310-914A-518959	Sequence 518959, A	C 505	11.2	62.2	25	8	US-10-310-914A-1365406	Sequence 1365406,
C 433	11.2	62.2	21	8	US-10-310-914A-519050	Sequence 519050, A	C 506	11.2	62.2	25	8	US-10-310-914A-1376796	Sequence 1376796,
C 434	11.2	62.2	21	8	US-10-310-914A-543508	Sequence 543508, A	C 507	11.2	62.2	25	8	US-10-310-914A-1376921	Sequence 1376921,
C 435	11.2	62.2	21	8	US-10-310-914A-578309	Sequence 578309, A	C 508	11.2	62.2	25	12	US-11-121-849-11765	Sequence 11765, A
C 436	11.2	62.2	21	8	US-10-310-914A-657042	Sequence 657042, A	C 509	11.2	62.2	25	12	US-11-121-849-14520	Sequence 14520, A
C 437	11.2	62.2	21	8	US-10-310-914A-675845	Sequence 675845, A	C 510	11.2	62.2	25	12	US-11-121-849-14521	Sequence 14521, A
C 438	11.2	62.2	21	8	US-10-310-914A-680353	Sequence 680353, A	C 511	11.2	62.2	25	12	US-11-121-849-35548	Sequence 35548, A
C 439	11.2	62.2	21	8	US-10-310-914A-797634	Sequence 797634, A	C 512	11.2	62.2	25	12	US-11-121-849-41982	Sequence 41982, A
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C 441	11.2	62.2	21	8	US-10-310-914A-977989	Sequence 977989, A	C 514	11.2	62.2	25	12	US-11-121-849-49692	Sequence 49692, A
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C 444	11.2	62.2	22	8	US-10-310-914A-113231	Sequence 113231, A	C 517	11.2	62.2	25	12	US-11-121-849-133179	Sequence 133179, A
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C 446	11.2	62.2	22	8	US-10-310-914A-322617	Sequence 322617, A	C 519	11.2	62.2	25	12	US-11-121-849-202087	Sequence 202087, A
C 447	11.2	62.2	22	8	US-10-310-914A-332914	Sequence 332914, A	C 520	11.2	62.2	25	12	US-11-121-849-202087	Sequence 202087, A
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C 452	11.2	62.2	22	8	US-10-310-914A-578310	Sequence 578310, A	C 525	11.2	62.2	25	12	US-11-121-849-250496	Sequence 250496, A
C 453	11.2	62.2	22	8	US-10-310-914A-616422	Sequence 616422, A	C 526	11.2	62.2	25	12	US-11-121-849-295509	Sequence 295509, A
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534	11.2	62.2	25	12	US-11-121-849-472186	Sequence 472186,	C 607	11	61.1	25	12	US-11-121-849-585481	Sequence 585481,
535	11.2	62.2	25	12	US-11-121-849-523076	Sequence 523076,	C 608	10.8	60.0	16	8	US-10-939-2994-15173	Sequence 15173, A
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C 704	10.8	60.0	20	8	US-10-310-914A-556663	Sequence 556663,
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C 734	10.8	60.0	22	8	US-10-310-914A-283541	Sequence 283541,
C 735	10.8	60.0	22	8	US-10-310-914A-325537	Sequence 325537,
C 736	10.8	60.0	22	8	US-10-310-914A-338152	Sequence 338152,
C 737	10.8	60.0	22	8	US-10-310-914A-338178	Sequence 338178,
C 738	10.8	60.0	22	8	US-10-310-914A-358035	Sequence 358035,
C 739	10.8	60.0	22	8	US-10-310-914A-358053	Sequence 358053,
C 740	10.8	60.0	22	8	US-10-310-914A-395882	Sequence 395882,
C 741	10.8	60.0	22	8	US-10-310-914A-688785	Sequence 688785,
C 742	10.8	60.0	22	8	US-10-310-914A-694384	Sequence 694384,
C 743	10.8	60.0	22	8	US-10-310-914A-700408	Sequence 700408,
C 744	10.8	60.0	22	8	US-10-310-914A-769659	Sequence 769659,
C 745	10.8	60.0	22	8	US-10-310-914A-795514	Sequence 795514,
C 746	10.8	60.0	22	8	US-10-310-914A-922787	Sequence 922787,
C 747	10.8	60.0	22	8	US-10-310-914A-1042349	Sequence 1042349,
C 748	10.8	60.0	22	8	US-10-310-914A-1117767	Sequence 1117767,
C 749	10.8	60.0	22	8	US-10-310-914A-1153412	Sequence 1153412,
C 750	10.8	60.0	22	8	US-10-310-914A-1185838	Sequence 1185838,
C 751	10.8	60.0	22	8	US-10-310-914A-1253056	Sequence 1253056,
C 752	10.8	60.0	23	8	US-10-310-914A-45681	Sequence 45681, A
C 753	10.8	60.0	23	8	US-10-310-914A-45682	Sequence 45682, A
C 754	10.8	60.0	23	8	US-10-310-914A-236159	Sequence 236159,
C 755	10.8	60.0	23	8	US-10-310-914A-363013	Sequence 363013,
C 756	10.8	60.0	23	8	US-10-310-914A-423442	Sequence 423442,
C 757	10.8	60.0	23	8	US-10-310-914A-423463	Sequence 423463,
C 758	10.8	60.0	23	8	US-10-310-914A-482492	Sequence 482492,
C 759	10.8	60.0	23	8	US-10-310-914A-512186	Sequence 512186,
C 760	10.8	60.0	23	8	US-10-310-914A-545550	Sequence 545550,
C 761	10.8	60.0	23	8	US-10-310-914A-552133	Sequence 552133,
C 762	10.8	60.0	23	8	US-10-310-914A-588254	Sequence 588254,
C 763	10.8	60.0	23	8	US-10-310-914A-670077	Sequence 670077,
C 764	10.8	60.0	23	8	US-10-310-914A-694385	Sequence 694385,
C 765	10.8	60.0	23	8	US-10-310-914A-896732	Sequence 896732,
C 766	10.8	60.0	23	8	US-10-310-914A-938460	Sequence 938460,
C 767	10.8	60.0	23	8	US-10-310-914A-1185951	Sequence 1185951,
C 768	10.8	60.0	23	8	US-10-310-914A-1289204	Sequence 1289204,
C 769	10.8	60.0	23	8	US-10-310-914A-1289210	Sequence 1289210,
C 770	10.8	60.0	23	8	US-10-310-914A-1289212	Sequence 1289212,
C 771	10.8	60.0	23	8	US-10-310-914A-1306064	Sequence 1306064,
C 772	10.8	60.0	23	12	US-11-069-908-2193	Sequence 2193, Ap
C 773	10.8	60.0	24	8	US-11-069-908-4559	Sequence 4559, Ap
C 774	10.8	60.0	24	8	US-10-310-914A-20973	Sequence 20973, A
C 775	10.8	60.0	24	8	US-10-310-914A-26809	Sequence 26809, A
C 776	10.8	60.0	24	8	US-10-310-914A-115297	Sequence 115297,
C 777	10.8	60.0	24	8	US-10-310-914A-124150	Sequence 124150,
C 778	10.8	60.0	24	8	US-10-310-914A-182663	Sequence 182663,
C 779	10.8	60.0	24	8	US-10-310-914A-358268	Sequence 358268,
C 780	10.8	60.0	24	8	US-10-310-914A-370452	Sequence 370452,
C 781	10.8	60.0	24	8	US-10-310-914A-458747	Sequence 458747,
C 782	10.8	60.0	24	8	US-10-310-914A-471690	Sequence 471690,
C 783	10.8	60.0	24	8	US-10-310-914A-545517	Sequence 545517,
C 784	10.8	60.0	24	8	US-10-310-914A-545532	Sequence 545532,
C 785	10.8	60.0	24	8	US-10-310-914A-545551	Sequence 545551,
C 786	10.8	60.0	24	8	US-10-310-914A-583334	Sequence 583334,
C 787	10.8	60.0	24	8	US-10-310-914A-605374	Sequence 605374,
C 788	10.8	60.0	24	8	US-10-310-914A-624757	Sequence 624757,
C 789	10.8	60.0	24	8	US-10-310-914A-688774	Sequence 688774,
C 790	10.8	60.0	24	8	US-10-310-914A-762709	Sequence 762709,
C 791	10.8	60.0	24	8	US-10-310-914A-795638	Sequence 795638,
C 792	10.8	60.0	24	8	US-10-310-914A-872936	Sequence 872936,
C 793	10.8	60.0	24	8	US-10-310-914A-872936	Sequence 872936,
C 794	10.8	60.0	24	8	US-10-310-914A-938474	Sequence 938474,
C 795	10.8	60.0	24	8	US-10-310-914A-1210020	Sequence 1210020,
C 796	10.8	60.0	24	8	US-10-310-914A-1213048	Sequence 1213048,
C 797	10.8	60.0	24	8	US-10-310-914A-1229941	Sequence 1229941,
C 798	10.8	60.0	24	8	US-10-310-914A-1343942	Sequence 1343942,
C 799	10.8	60.0	25	8	US-10-310-914A-120196	Sequence 120196,
C 800	10.8	60.0	25	8	US-10-310-914A-150853	Sequence 150853,
C 801	10.8	60.0	25	8	US-10-310-914A-556690	Sequence 556690,
C 802	10.8	60.0	25	8	US-10-310-914A-699116	Sequence 699116,
C 803	10.8	60.0	25	8	US-10-310-914A-884530	Sequence 884530,
C 804	10.8	60.0	25	12	US-11-121-849-18437	Sequence 18437, Ap
C 805	10.8	60.0	25	12	US-11-121-849-33362	Sequence 33362, A
C 806	10.8	60.0	25	12	US-11-121-849-50624	Sequence 50624, A
C 807	10.8	60.0	25	12	US-11-121-849-15667	Sequence 15667,
C 808	10.8	60.0	25	12	US-11-121-849-126998	Sequence 126998,
C 809	10.8	60.0	25	12	US-11-121-849-126998	Sequence 126998,
C 810	10.8	60.0	25	12	US-11-121-849-159029	Sequence 159029,
C 811	10.8	60.0	25	12	US-11-121-849-159030	Sequence 159030,
C 812	10.8	60.0	25	12	US-11-121-849-160154	Sequence 160154,
C 813	10.8	60.0	25	12	US-11-121-849-18771	Sequence 18771,
C 814	10.8	60.0	25	12	US-11-121-849-185876	Sequence 185876,
C 815	10.8	60.0	25	12	US-11-121-849-187499	Sequence 187499,
C 816	10.8	60.0	25	12	US-11-121-849-218741	Sequence 218741,
C 817	10.8	60.0	25	12	US-11-121-849-239247	Sequence 239247,
C 818	10.8	60.0	25	12	US-11-121-849-243572	Sequence 243572,
C 819	10.8	60.0	25	12	US-11-121-849-271268	Sequence 271268,
C 820	10.8	60.0	25	12	US-11-121-849-274533	Sequence 274533,
C 821	10.8	60.0	25	12	US-11-121-849-277491	Sequence 277491,
C 822	10.8	60.0	25	12	US-11-121-849-277491	Sequence 277491,
C 823	10.8	60.0	25	12	US-11-121-849-277491	Sequence 277491,

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C 825	10.8	60.0	25	12	US-11-121-849-300090	Sequence 300090,	C 898	10.8	60.0	25	12	US-11-136-527-184357	Sequence 184357,
C 826	10.8	60.0	25	12	US-11-121-849-300091	Sequence 300091,	C 899	10.8	60.0	25	12	US-11-136-527-184359	Sequence 184359,
C 827	10.8	60.0	25	12	US-11-121-849-300092	Sequence 300092,	C 900	10.8	60.0	25	12	US-11-136-527-184361	Sequence 184361,
C 828	10.8	60.0	25	12	US-11-121-849-300093	Sequence 300093,	C 901	10.8	60.0	25	12	US-11-136-527-184363	Sequence 184363,
C 829	10.8	60.0	25	12	US-11-121-849-300094	Sequence 300094,	C 902	10.8	60.0	25	12	US-11-136-527-184463	Sequence 184463,
C 830	10.8	60.0	25	12	US-11-121-849-304773	Sequence 304773,	C 903	10.8	60.0	25	12	US-11-136-527-184465	Sequence 184465,
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C 832	10.8	60.0	25	12	US-11-121-849-304775	Sequence 304775,	C 905	10.8	60.0	25	12	US-11-136-527-193231	Sequence 193231,
C 833	10.8	60.0	25	12	US-11-121-849-304897	Sequence 304897,	C 906	10.8	60.0	25	12	US-11-136-527-234595	Sequence 234595,
C 834	10.8	60.0	25	12	US-11-121-849-311084	Sequence 311084,	C 907	10.8	60.0	25	12	US-11-136-527-234596	Sequence 234596,
C 835	10.8	60.0	25	12	US-11-121-849-311392	Sequence 311392,	C 908	10.8	60.0	25	12	US-11-136-527-234600	Sequence 234600,
C 836	10.8	60.0	25	12	US-11-121-849-325611	Sequence 325611,	C 909	10.8	60.0	25	12	US-11-136-527-234603	Sequence 234603,
C 837	10.8	60.0	25	12	US-11-121-849-326183	Sequence 326183,	C 910	10.8	60.0	25	12	US-11-136-527-234606	Sequence 234606,
C 838	10.8	60.0	25	12	US-11-121-849-335744	Sequence 335744,	C 911	10.8	60.0	25	12	US-11-136-527-234607	Sequence 234607,
C 839	10.8	60.0	25	12	US-11-121-849-352460	Sequence 352460,	C 912	10.8	60.0	25	12	US-11-136-527-234610	Sequence 234610,
C 840	10.8	60.0	25	12	US-11-121-849-352461	Sequence 352461,	C 913	10.8	60.0	25	12	US-11-136-527-234619	Sequence 234619,
C 841	10.8	60.0	25	12	US-11-121-849-389251	Sequence 389251,	C 914	10.8	60.0	25	12	US-11-136-527-262629	Sequence 262629,
C 842	10.8	60.0	25	12	US-11-121-849-393938	Sequence 393938,	C 915	10.8	60.0	25	12	US-11-136-527-263882	Sequence 263882,
C 843	10.8	60.0	25	12	US-11-121-849-401380	Sequence 401380,	C 916	10.8	60.0	25	12	US-11-136-527-271599	Sequence 271599,
C 844	10.8	60.0	25	12	US-11-121-849-408164	Sequence 408164,	C 917	10.8	60.0	25	12	US-11-136-527-314906	Sequence 314906,
C 845	10.8	60.0	25	12	US-11-121-849-408165	Sequence 408165,	C 918	10.8	60.0	25	12	US-11-136-527-314911	Sequence 314911,
C 846	10.8	60.0	25	12	US-11-121-849-413779	Sequence 413779,	C 919	10.8	60.0	25	12	US-11-136-527-314914	Sequence 314914,
C 847	10.8	60.0	25	12	US-11-121-849-414027	Sequence 414027,	C 920	10.8	60.0	25	12	US-11-136-527-322812	Sequence 322812,
C 848	10.8	60.0	25	12	US-11-121-849-416452	Sequence 416452,	C 921	10.8	60.0	25	12	US-11-136-527-338739	Sequence 338739,
C 849	10.8	60.0	25	12	US-11-121-849-417638	Sequence 417638,	C 922	10.8	60.0	25	12	US-11-136-527-358739	Sequence 358739,
C 850	10.8	60.0	25	12	US-11-121-849-433030	Sequence 433030,	C 923	10.8	60.0	25	12	US-11-136-527-359650	Sequence 359650,
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C 852	10.8	60.0	25	12	US-11-121-849-462760	Sequence 462760,	C 925	10.8	60.0	25	12	US-10-310-914A-679498	Sequence 679498,
C 853	10.8	60.0	25	12	US-11-121-849-462761	Sequence 462761,	C 926	10.8	60.0	25	8	US-10-310-914A-762710	Sequence 762710,
C 854	10.8	60.0	25	12	US-11-121-849-472187	Sequence 472187,	C 927	10.8	60.0	25	8	US-10-310-914A-1006079	Sequence 1006079,
C 855	10.8	60.0	25	12	US-11-121-849-472188	Sequence 472188,	C 928	10.8	60.0	25	8	US-10-310-914A-1117745	Sequence 1117745,
C 856	10.8	60.0	25	12	US-11-121-849-477615	Sequence 477615,	C 929	10.8	60.0	25	8	US-10-310-914A-1153411	Sequence 1153411,
C 857	10.8	60.0	25	12	US-11-121-849-492318	Sequence 492318,	C 930	10.8	60.0	25	8	US-10-310-914A-1213082	Sequence 1213082,
C 858	10.8	60.0	25	12	US-11-121-849-500980	Sequence 500980,	C 931	10.8	60.0	25	8	US-10-310-914A-1229942	Sequence 1229942,
C 859	10.8	60.0	25	12	US-11-121-849-523612	Sequence 523612,	C 932	10.8	60.0	25	8	US-10-310-914A-1309589	Sequence 1309589,
C 860	10.8	60.0	25	12	US-11-121-849-523615	Sequence 523615,	C 933	10.8	60.0	26	8	US-10-310-914A-975997	Sequence 975997, A
C 861	10.8	60.0	25	12	US-11-121-849-557890	Sequence 557890,	C 934	10.8	60.0	27	8	US-10-310-914A-1181461	Sequence 1181461,
C 862	10.8	60.0	25	12	US-11-121-849-559404	Sequence 559404,	C 935	10.8	60.0	30	8	US-10-310-914A-142357	Sequence 142357,
C 863	10.8	60.0	25	12	US-11-121-849-561235	Sequence 561235,	C 936	10.8	60.0	30	8	US-10-310-914A-1039951	Sequence 1039951,
C 864	10.8	60.0	25	12	US-11-121-849-561741	Sequence 561741,	C 937	10.8	60.0	17	8	US-10-310-914A-1209178	Sequence 1209178,
C 865	10.8	60.0	25	12	US-11-121-849-585714	Sequence 585714,	C 938	10.6	58.9	13	8	US-10-858-341-595	Sequence 595, App
C 866	10.8	60.0	25	12	US-11-121-849-585781	Sequence 585781,	C 939	10.6	58.9	18	8	US-10-310-914A-560230	Sequence 560230,
C 867	10.8	60.0	25	12	US-11-121-849-606537	Sequence 606537,	C 940	10.6	58.9	18	8	US-10-310-914A-576523	Sequence 576523,
C 868	10.8	60.0	25	12	US-11-121-849-615230	Sequence 615230,	C 941	10.6	58.9	18	8	US-10-310-914A-604368	Sequence 604368,
C 869	10.8	60.0	25	12	US-11-121-849-669546	Sequence 669546,	C 942	10.6	58.9	18	8	US-10-310-914A-9433903	Sequence 9433903,
C 870	10.8	60.0	25	12	US-11-121-849-669547	Sequence 669547,	C 943	10.6	58.9	18	8	US-10-310-914A-1006958	Sequence 1006958,
C 871	10.8	60.0	25	12	US-11-136-527-159550	Sequence 159550,	C 944	10.6	58.9	18	8	US-10-310-914A-1055316	Sequence 1055316,
C 872	10.8	60.0	25	12	US-11-136-527-159564	Sequence 159564,	C 945	10.6	58.9	18	8	US-10-310-914A-1315085	Sequence 1315085,
C 873	10.8	60.0	25	12	US-11-136-527-159565	Sequence 159565,	C 946	10.6	58.9	18	8	US-10-310-914A-1359906	Sequence 1359906,
C 874	10.8	60.0	25	12	US-11-136-527-176407	Sequence 176407,	C 947	10.6	58.9	18	8	US-10-310-914A-1364892	Sequence 1364892,
C 875	10.8	60.0	25	12	US-11-136-527-183929	Sequence 183929,	C 948	10.6	58.9	19	8	US-10-858-341-594	Sequence 594, App
C 876	10.8	60.0	25	12	US-11-136-527-183935	Sequence 183935,	C 949	10.6	58.9	19	8	US-10-310-914A-229116	Sequence 229116,
C 877	10.8	60.0	25	12	US-11-136-527-183948	Sequence 183948,	C 950	10.6	58.9	19	8	US-10-310-914A-173567	Sequence 173567,
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C 879	10.8	60.0	25	12	US-11-136-527-183963	Sequence 183963,	C 952	10.6	58.9	19	8	US-10-310-914A-703607	Sequence 703607,
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C 882	10.8	60.0	25	12	US-11-136-527-184031	Sequence 184031,	C 955	10.6	58.9	19	8	US-10-310-914A-910877	Sequence 910877,
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C 884	10.8	60.0	25	12	US-11-136-527-184133	Sequence 184133,	C 957	10.6	58.9	19	8	US-10-310-914A-1239950	Sequence 1239950,
C 885	10.8	60.0	25	12	US-11-136-527-184135	Sequence 184135,	C 958	10.6	58.9	19	8	US-10-310-914A-1325367	Sequence 1325367,
C 886	10.8	60.0	25	12	US-11-136-527-184137	Sequence 184137,	C 959	10.6	58.9	19	10	US-11-101-244-38838	Sequence 38838, A
C 887	10.8	60.0	25	12	US-11-136-527-184139	Sequence 184139,	C 960	10.6	58.9	19	10	US-11-101-244-337037	Sequence 337037,
C 888	10.8	60.0	25	12	US-11-136-527-184141	Sequence 184141,	C 961	10.6	58.9	19	10	US-11-101-244-367462	Sequence 367462,
C 889	10.8	60.0	25	12	US-11-136-527-184143	Sequence 184143,	C 962	10.6	58.9	19	10	US-11-101-244-371857	Sequence 371857,
C 890	10.8	60.0	25	12	US-11-136-527-184243	Sequence 184243,	C 963	10.6	58.9	19	10	US-11-101-244-528832	Sequence 528832,
C 891	10.8	60.0	25	12	US-11-136-527-184245	Sequence 184245,	C 964	10.6	58.9	19	10	US-11-101-244-558774	Sequence 558774,
C 892	10.8	60.0	25	12	US-11-136-527-184247	Sequence 184247,	C 965	10.6	58.9	19	10	US-11-101-244-737924	Sequence 737924,
C 893	10.8	60.0	25	12	US-11-136-527-184249	Sequence 184249,	C 966	10.6	58.9	19	10	US-11-101-244-855250	Sequence 855250,
C 894	10.8	60.0	25	12	US-11-136-527-184251	Sequence 184251,	C 967	10.6	58.9	19	10	US-11-101-244-890140	Sequence 890140,
C 895	10.8	60.0	25	12	US-11-136-527-184253	Sequence 184253,	C 968	10.6	58.9	19	10	US-11-101-244-962014	Sequence 962014,
C 896	10.8	60.0	25	12	US-11-136-527-184353	Sequence 184353,	C 969	10.6	58.9	19	10	US-11-101-244-1044504	Sequence 1044504,



```
970 10.6 58.9 19 10 US-11-101-244-1058828 Sequence 1058828,
C 971 10.6 58.9 19 10 US-11-101-244-1093047 Sequence 1093047,
C 972 10.6 58.9 19 10 US-11-101-244-1093150 Sequence 1093150,
C 973 10.6 58.9 19 10 US-11-101-244-1151286 Sequence 1151286,
C 974 10.6 58.9 19 10 US-11-101-244-1389807 Sequence 1389807,
C 975 10.6 58.9 19 10 US-11-101-244-1433234 Sequence 1433234,
C 976 10.6 58.9 19 10 US-11-101-244-1487338 Sequence 1487338,
C 977 10.6 58.9 19 10 US-11-101-244-1495048 Sequence 1495048,
C 978 10.6 58.9 19 10 US-11-101-244-1523048 Sequence 1523048,
C 979 10.6 58.9 19 10 US-11-101-244-1568935 Sequence 1568935,
C 980 10.6 58.9 19 10 US-11-101-244-1568961 Sequence 1568961,
C 981 10.6 58.9 19 10 US-11-101-244-1574482 Sequence 1574482,
C 982 10.6 58.9 19 11 US-11-083-784-38838 Sequence 38838, A
C 983 10.6 58.9 19 11 US-11-083-784-337097 Sequence 337097,
C 984 10.6 58.9 19 11 US-11-083-784-367462 Sequence 367462,
C 985 10.6 58.9 19 11 US-11-083-784-371857 Sequence 371857,
C 986 10.6 58.9 19 11 US-11-083-784-528832 Sequence 528832,
C 987 10.6 58.9 19 11 US-11-083-784-558774 Sequence 558774,
C 988 10.6 58.9 19 11 US-11-083-784-737924 Sequence 737924,
C 989 10.6 58.9 19 11 US-11-083-784-855290 Sequence 855290,
C 990 10.6 58.9 19 11 US-11-083-784-890140 Sequence 890140,
C 991 10.6 58.9 19 11 US-11-083-784-962014 Sequence 962014,
C 992 10.6 58.9 19 11 US-11-083-784-1044504 Sequence 1044504,
C 993 10.6 58.9 19 11 US-11-083-784-1058828 Sequence 1058828,
C 994 10.6 58.9 19 11 US-11-083-784-1093047 Sequence 1093047,
C 995 10.6 58.9 19 11 US-11-083-784-1093150 Sequence 1093150,
C 996 10.6 58.9 19 11 US-11-083-784-1151286 Sequence 1151286,
C 997 10.6 58.9 19 11 US-11-083-784-1389807 Sequence 1389807,
C 998 10.6 58.9 19 11 US-11-083-784-1433234 Sequence 1433234,
C 999 10.6 58.9 19 11 US-11-083-784-1487338 Sequence 1487338,
C1000 10.6 58.9 19 11 US-11-083-784-1495048 Sequence 1495048,
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## ALIGNMENTS

```
RESULT 1
US-10-994-213-7/c
; Sequence 7, Application US/10994213
; Publication No. US20060019911A1
; GENERAL INFORMATION:
; APPLICANT: Papisov, Mikhail, I.
; TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF
; TITLE OF INVENTION: USE THEREOF
; FILE REFERENCE: 0838.1003-001
; CURRENT APPLICATION NUMBER: US/10/994,213
; PRIOR FILING DATE: 2004-11-19
; PRIOR APPLICATION NUMBER: US/09/634,320
; PRIOR FILING DATE: 2000-08-09
; PRIOR APPLICATION NUMBER: US 60/147,919
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-994-213-7
```

```
Query Match 100.0%; Score 18; DB 7; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.2;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 TCTCCAGCGTGGCCCAT 18
DB 18 TCTCCAGCGTGGCCCAT 1
```

```
RESULT 2
US-10-918-638-24
; Sequence 24, Application US/10918638
```

```
; Publication No. US20050249663A1
; GENERAL INFORMATION:
; APPLICANT: Cophares
; TITLE OF INVENTION: COBALAMIN MEDIATED DELIVERY OF NUCLEIC ACIDS, ANALOGS
; TITLE OF INVENTION: AND
; TITLE OF INVENTION: DERIVATIVES THEREOF
; FILE REFERENCE: COP1010
; CURRENT APPLICATION NUMBER: US/10/918,638
; PRIOR FILING DATE: 2004-08-12
; PRIOR APPLICATION NUMBER: US/10/246,300
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 18
; TYPE: DNA
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: oligonucleotide-- G3139 Gentra
US-10-918-638-24
```

```
Query Match 100.0%; Score 18; DB 8; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.2;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TCTCCAGCGTGGCCCAT 18
DB 1 TCTCCAGCGTGGCCCAT 18
```

```
RESULT 3
US-10-658-947-14
; Sequence 14, Application US/10658947
; Publication No. US20050255153A1
; GENERAL INFORMATION:
; APPLICANT: Inex Pharmaceuticals Inc.
; TITLE OF INVENTION: High Efficiency Encapsulation of Charged Therapeutic
; Agents in
; Lipid Vesicles
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Oppehahl & Larson LLP
; STREET: PO Box 5068
; CITY: Dillon
; STATE: CO
; COUNTRY: US
; ZIP: 80435
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS 5.0
; SOFTWARE: Word Perfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/658,947
; FILING DATE: 09-Sep-2003
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/895,480
; FILING DATE: 29-Jun-2001
; APPLICATION NUMBER: <Unknown>
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: <Unknown>
; REGISTRATION NUMBER: <Unknown>
; REFERENCE/DOCKET NUMBER: <Unknown>
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: <Unknown>
; TELEFAX: <Unknown>
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18
; TYPE: nucleic acid
; STRANDEDNESS: single
```



TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
HYPOTHEetical: no  
ANTI-SENSE: yes  
SEQUENCE DESCRIPTION: SEQ ID NO: 14:  
US-10-658-947-14

Query Match 100.0%; Score 18; DB 8; Length 18;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 4  
US-10-469-561-6  
Sequence 6, Application US/10469561  
Publication No. US20050260216A1  
GENERAL INFORMATION:  
APPLICANT: Claire Ashman  
APPLICANT: James Scott Crowe  
APPLICANT: Jonathan Henry Ellis  
APPLICANT: Alan Peter Lewis  
TITLE OF INVENTION: VACCINE  
FILE REFERENCE: PG435USW  
CURRENT APPLICATION NUMBER: US/10/469,561  
CURRENT FILING DATE: 2003-08-29  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 6  
LENGTH: 18  
TYPE: DNA  
ORGANISM: unknown  
FEATURE:  
OTHER INFORMATION: synthetic immunostimulatory oligonucleotide  
US-10-469-561-6

Query Match 100.0%; Score 18; DB 8; Length 18;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 5  
US-10-619-279-45  
Sequence 45, Application US/10619279  
Publication No. US20050267057A1  
GENERAL INFORMATION:  
APPLICANT: Krieg, Arthur M.  
TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
FILE REFERENCE: C1039/7023/HCL  
CURRENT APPLICATION NUMBER: US/10/619,279  
CURRENT FILING DATE: 2003-07-14  
PRIOR APPLICATION NUMBER: US 08/960,774  
PRIOR FILING DATE: 1997-10-30  
PRIOR APPLICATION NUMBER: US 08/738,652  
PRIOR FILING DATE: 1996-10-30  
PRIOR APPLICATION NUMBER: US 08/386,063  
PRIOR FILING DATE: 1995-02-07  
PRIOR APPLICATION NUMBER: US 60/276,358  
PRIOR FILING DATE: 1994-07-15  
NUMBER OF SEQ ID NOS: 123  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 45  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:

OTHER INFORMATION: Synthetic Oligonucleotide  
US-10-619-279-45

Query Match 100.0%; Score 18; DB 8; Length 18;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 6  
US-10-435-656-55  
Sequence 55, Application US/10435656  
Publication No. US20050277604A1  
GENERAL INFORMATION:  
APPLICANT: Krieg, Arthur M.  
APPLICANT: Kline, Joel N.  
APPLICANT: Kline, Dennis  
APPLICANT: Steinberg, Alfred D.  
TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
FILE REFERENCE: C1039/7048 (AMS)  
CURRENT APPLICATION NUMBER: US/10/435,656  
CURRENT FILING DATE: 2003-05-09  
PRIOR APPLICATION NUMBER: US 08/276,358  
PRIOR FILING DATE: 1994-07-15  
PRIOR APPLICATION NUMBER: US 08/386,063  
PRIOR FILING DATE: 1995-02-07  
PRIOR APPLICATION NUMBER: US 08/738,652  
PRIOR FILING DATE: 1996-10-30  
NUMBER OF SEQ ID NOS: 56  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 55  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide  
US-10-435-656-55

Query Match 100.0%; Score 18; DB 8; Length 18;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 7  
US-11-127-654-1  
Sequence 1, Application US/1127654  
Publication No. US20050250726A1  
GENERAL INFORMATION:  
APPLICANT: Krieg, Arthur M.  
APPLICANT: Berg, Daniel J.  
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC  
FILE REFERENCE: C1039.7006US01  
CURRENT APPLICATION NUMBER: US/11/127,654  
CURRENT FILING DATE: 2005-05-12  
PRIOR APPLICATION NUMBER: US 10/112,653  
PRIOR FILING DATE: 2002-03-29  
PRIOR APPLICATION NUMBER: US 60/279,642  
PRIOR FILING DATE: 2001-03-29  
NUMBER OF SEQ ID NOS: 1040  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 1  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial sequence  
FEATURE:

OTHER INFORMATION: Synthetic oligonucleotide  
US-11-127-654-1

Query Match 100.0%; Score 18; DB 12; Length 18;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 8  
US-11-127-654-85  
Sequence 85, Application US/11127654  
Publication No. US20050250726A1  
GENERAL INFORMATION:

APPLICANT: Krieg, Arthur M.  
APPLICANT: Berg, Daniel J.  
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC  
FILE REFERENCE: C1039.70060US01  
CURRENT APPLICATION NUMBER: US/11/127,654  
CURRENT FILING DATE: 2005-05-12  
PRIOR APPLICATION NUMBER: US 10/112,653  
PRIOR FILING DATE: 2002-03-29  
PRIOR APPLICATION NUMBER: US 60/279,642  
PRIOR FILING DATE: 2001-03-29  
NUMBER OF SEQ ID NOS: 1040  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 85  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide  
US-11-127-654-85

Query Match 100.0%; Score 18; DB 12; Length 18;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 9  
US-11-081-140-6  
Sequence 6, Application US/11081140  
Publication No. US20050261225A1  
GENERAL INFORMATION:

APPLICANT: Stein, Cy A  
APPLICANT: Benimetskaya, Lyuba  
APPLICANT: Guzzo-Petrelli, Nancy  
TITLE OF INVENTION: PEPTIDES THAT COMPLEX WITH ANTISENSE OLIGONUCLEOTIDES WHICH DOWN  
FILE REFERENCE: 0575/63293  
CURRENT APPLICATION NUMBER: US/11/081,140  
CURRENT FILING DATE: 2005-03-15  
PRIOR APPLICATION NUMBER: US/10/002,884  
PRIOR FILING DATE: 2001-11-02  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 6  
LENGTH: 18  
TYPE: DNA  
ORGANISM: ARTIFICIAL SEQUENCE  
FEATURE:  
OTHER INFORMATION: ANTISENSE OLIGONUCLEOTIDE  
US-11-081-140-6

Query Match 100.0%; Score 18; DB 12; Length 18;

Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 10  
US-11-134-918-55  
Sequence 55, Application US/11134918  
Publication No. US20050267064A1  
GENERAL INFORMATION:

APPLICANT: Krieg, Arthur M.  
APPLICANT: Kline, Joel N.  
APPLICANT: Kliman, Dennis  
APPLICANT: Steinberg, Alfred D.  
TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
FILE REFERENCE: C1039/7048 (AMS)  
CURRENT APPLICATION NUMBER: US/11/134,918  
CURRENT FILING DATE: 2005-05-23  
PRIOR APPLICATION NUMBER: US/09/818,918  
PRIOR FILING DATE: 2001-03-27  
PRIOR APPLICATION NUMBER: US 08/276,358  
PRIOR FILING DATE: 1994-07-15  
PRIOR APPLICATION NUMBER: US 08/386,063  
PRIOR FILING DATE: 1995-02-07  
PRIOR APPLICATION NUMBER: US 08/738,652  
PRIOR FILING DATE: 1996-10-30  
NUMBER OF SEQ ID NOS: 56  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 55  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide  
US-11-134-918-55

Query Match 100.0%; Score 18; DB 12; Length 18;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 11  
US-11-031-460-55  
Sequence 55, Application US/11031460  
Publication No. US20050277609A1  
GENERAL INFORMATION:

APPLICANT: Krieg, Arthur M.  
APPLICANT: Kline, Joel N.  
APPLICANT: Kliman, Dennis  
APPLICANT: Steinberg, Alfred D.  
TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
FILE REFERENCE: C1039/7048 (AMS)  
CURRENT APPLICATION NUMBER: US/11/031,460  
CURRENT FILING DATE: 2005-01-07  
PRIOR APPLICATION NUMBER: US/09/818,918  
PRIOR FILING DATE: 2001-03-27  
PRIOR APPLICATION NUMBER: US 08/276,358  
PRIOR FILING DATE: 1994-07-15  
PRIOR APPLICATION NUMBER: US 08/386,063  
PRIOR FILING DATE: 1995-02-07  
PRIOR APPLICATION NUMBER: US 08/738,652  
PRIOR FILING DATE: 1996-10-30  
NUMBER OF SEQ ID NOS: 56  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 55  
LENGTH: 18

```

; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-55
```

```
Query Match          100.0%; Score 18; DB 12; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.2;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
```

```

RESULT 12
US-11-067-587-55
; Sequence 55, Application US/11067587
; Publication No. US2006003955A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Kliman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AMS)
; CURRENT APPLICATION NUMBER: US/11/067,587
; CURRENT FILING DATE: 2005-02-25
; PRIOR APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FaastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-55
```

```
Query Match          100.0%; Score 18; DB 12; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.2;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
```

```

RESULT 13
US-11-099-683-131
; Sequence 131, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
; FILE REFERENCE: C1037,70047US01
; CURRENT APPLICATION NUMBER: US/11/099,683
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: US 60/558,951
; PRIOR FILING DATE: 2004-04-02
; NUMBER OF SEQ ID NOS: 143
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 131
; LENGTH: 18
; TYPE: DNA
```

```

; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-131
```

```
Query Match          100.0%; Score 18; DB 12; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.2;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
```

```

RESULT 14
US-11-099-683-132
; Sequence 132, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
; FILE REFERENCE: C1037,70047US01
; CURRENT APPLICATION NUMBER: US/11/099,683
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: US 60/558,951
; PRIOR FILING DATE: 2004-04-02
; NUMBER OF SEQ ID NOS: 143
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 132
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-132
```

```
Query Match          100.0%; Score 18; DB 12; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.2;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
        |||||
Db       1 TCTCCAGCGTGGCCAT 18
```

```

RESULT 15
US-10-994-213-8
; Sequence 8, Application US/10994213
; Publication No. US20060019911A1
; GENERAL INFORMATION:
; APPLICANT: Padirov, Mikhail, I.
; TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF
; FILE REFERENCE: 0838.1003-001
; CURRENT APPLICATION NUMBER: US/10/994,213
; CURRENT FILING DATE: 2004-11-19
; PRIOR APPLICATION NUMBER: US/09/634,320
; PRIOR FILING DATE: 2000-08-09
; PRIOR APPLICATION NUMBER: US 60/147,919
; PRIOR FILING DATE: 1999-08-09
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
; OTHER INFORMATION: c indicates an RNA base
US-10-994-213-8
```

Query Match 100.0%; Score 18; DB 7; Length 19;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18  
1 TCTCCAGCGTGCGCCAT 18  
DB 1 TCTCCAGCGTGCGCCAT 18

RESULT 16  
US-10-994-213-9/c

; Sequence 9, Application US/10994213  
; Publication No. US20060019911A1  
; GENERAL INFORMATION:  
; APPLICANT: Papisov, Mikhail, I.  
; TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF  
; FILE REFERENCE: 0838.1003-001  
; CURRENT APPLICATION NUMBER: US/10/994,213  
; CURRENT FILING DATE: 2004-11-19  
; PRIOR APPLICATION NUMBER: US/09/634,320  
; PRIOR FILING DATE: 2000-08-09  
; PRIOR APPLICATION NUMBER: US 60/147,919  
; PRIOR FILING DATE: 1999-08-09  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 9  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
; OTHER INFORMATION: c indicates an RNA base  
US-10-994-213-9

Query Match 100.0%; Score 18; DB 7; Length 19;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18  
1 TCTCCAGCGTGCGCCAT 18  
DB 1 TCTCCAGCGTGCGCCAT 1

RESULT 17

US-11-127-654-81  
; Sequence 81, Application US/11127654  
; Publication No. US20050250726A1  
; GENERAL INFORMATION:  
; APPLICANT: Kries, Arthur M.  
; APPLICANT: Berg, Daniel J.  
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC  
; FILE REFERENCE: C1039.70060US01  
; CURRENT APPLICATION NUMBER: US/11/127,654  
; CURRENT FILING DATE: 2005-05-12  
; PRIOR APPLICATION NUMBER: US 10/112,653  
; PRIOR FILING DATE: 2002-03-29  
; PRIOR APPLICATION NUMBER: US 60/279,642  
; PRIOR FILING DATE: 2001-03-29  
; NUMBER OF SEQ ID NOS: 1040  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 81  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide  
US-11-127-654-81

Query Match 100.0%; Score 18; DB 12; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.2;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18  
1 TCTCCAGCGTGCGCCAT 18  
DB 1 TCTCCAGCGTGCGCCAT 18

RESULT 18  
US-10-994-213-1

; Sequence 1, Application US/10994213  
; Publication No. US20060019911A1  
; GENERAL INFORMATION:  
; APPLICANT: Papisov, Mikhail, I.  
; TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF  
; FILE REFERENCE: 0838.1003-001  
; CURRENT APPLICATION NUMBER: US/10/994,213  
; CURRENT FILING DATE: 2004-11-19  
; PRIOR APPLICATION NUMBER: US/09/634,320  
; PRIOR FILING DATE: 2000-08-09  
; PRIOR APPLICATION NUMBER: US 60/147,919  
; PRIOR FILING DATE: 1999-08-09  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 23  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
US-10-994-213-1

Query Match 100.0%; Score 18; DB 7; Length 23;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18  
4 TCTCCAGCGTGCGCCAT 21  
DB 4 TCTCCAGCGTGCGCCAT 21

RESULT 19  
US-10-994-213-2/c  
; Sequence 2, Application US/10994213  
; Publication No. US20060019911A1  
; GENERAL INFORMATION:  
; APPLICANT: Papisov, Mikhail, I.  
; TITLE OF INVENTION: DRUG-CARRIER COMPLEXES AND METHODS OF  
; FILE REFERENCE: 0838.1003-001  
; CURRENT APPLICATION NUMBER: US/10/994,213  
; CURRENT FILING DATE: 2004-11-19  
; PRIOR APPLICATION NUMBER: US/09/634,320  
; PRIOR FILING DATE: 2000-08-09  
; PRIOR APPLICATION NUMBER: US 60/147,919  
; PRIOR FILING DATE: 1999-08-09  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 23  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
; OTHER INFORMATION: t = amino modified T  
US-10-994-213-2

Query Match 100.0%; Score 18; DB 7; Length 23;  
Best Local Similarity 100.0%; Pred. No. 4.2;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18

Db 20 TCTCCAGCGTGGCCAT 3

## RESULT 20

US-11-201-322-2/c  
; Sequence 2, Application US/11201322  
; Publication No. US20050272129A1  
; GENERAL INFORMATION:  
; APPLICANT: Sharon, Amir  
; APPLICANT: Goldstein-Barhoom, Sima  
; TITLE OF INVENTION: TRANSGENIC FUNGI EXPRESSING BCL-2 AND METHODS OF USING BCL-2 OR F  
; TITLE OF INVENTION: THEREOF FOR IMPROVING BIOMASS PRODUCTION, SURVIVAL, LONGEVITY AN  
; FILE REFERENCE: 30302  
; CURRENT APPLICATION NUMBER: US/11/201,322  
; CURRENT FILING DATE: 2005-08-11  
; NUMBER OF SEQ ID NOS: 5  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 2  
; LENGTH: 30  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Single strand DNA oligonucleotide  
US-11-201-322-2

Query Match 100.0%; Score 18; DB 12; Length 30;  
Best Local Similarity 100.0%; Pred. No. 4.3;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 24 TCTCCAGCGTGGCCAT 7

## RESULT 21

US-10-619-279-72  
; Sequence 72, Application US/10619279  
; Publication No. US20050267057A1  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
; FILE REFERENCE: C1039/7023/HCL  
; CURRENT APPLICATION NUMBER: US/10/619,279  
; CURRENT FILING DATE: 2003-07-14  
; PRIOR APPLICATION NUMBER: US 08/960,774  
; PRIOR FILING DATE: 1997-10-30  
; PRIOR APPLICATION NUMBER: US 08/738,652  
; PRIOR FILING DATE: 1996-10-30  
; PRIOR APPLICATION NUMBER: US 08/386,063  
; PRIOR FILING DATE: 1995-02-07  
; PRIOR APPLICATION NUMBER: US 08/276,358  
; PRIOR FILING DATE: 1994-07-15  
; NUMBER OF SEQ ID NOS: 123  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 72  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Oligonucleotide  
US-10-619-279-72

Query Match 91.1%; Score 16.4; DB 8; Length 18;  
Best Local Similarity 94.4%; Pred. No. 29;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 22

US-11-127-654-72  
; Sequence 72, Application US/11127654  
; Publication No. US20050250726A1  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; APPLICANT: Berg, Daniel J.  
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC  
; TITLE OF INVENTION: INFLAMMATORY DISEASES  
; FILE REFERENCE: C1039.70060US01  
; CURRENT APPLICATION NUMBER: US/11/127,654  
; CURRENT FILING DATE: 2005-05-12  
; PRIOR APPLICATION NUMBER: US 10/112,653  
; PRIOR FILING DATE: 2002-03-29  
; PRIOR APPLICATION NUMBER: US 60/279,642  
; PRIOR FILING DATE: 2001-03-29  
; NUMBER OF SEQ ID NOS: 1040  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 72  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide  
US-11-127-654-72

Query Match 91.1%; Score 16.4; DB 12; Length 18;  
Best Local Similarity 94.4%; Pred. No. 29;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 23

US-11-127-654-73  
; Sequence 73, Application US/11127654  
; Publication No. US20050250726A1  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; APPLICANT: Berg, Daniel J.  
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC  
; TITLE OF INVENTION: INFLAMMATORY DISEASES  
; FILE REFERENCE: C1039.70060US01  
; CURRENT APPLICATION NUMBER: US/11/127,654  
; CURRENT FILING DATE: 2005-05-12  
; PRIOR APPLICATION NUMBER: US 10/112,653  
; PRIOR FILING DATE: 2002-03-29  
; PRIOR APPLICATION NUMBER: US 60/279,642  
; PRIOR FILING DATE: 2001-03-29  
; NUMBER OF SEQ ID NOS: 1040  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 73  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide  
US-11-127-654-73

Query Match 91.1%; Score 16.4; DB 12; Length 18;  
Best Local Similarity 94.4%; Pred. No. 29;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

## RESULT 24

US-11-127-654-393  
; Sequence 393, Application US/11127654

```
Publication No. US20050250726A1
GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
FILE REFERENCE: C1039.70060US01
CURRENT FILING DATE: 2005-05-12
PRIOR FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: US 10/112,653
PRIOR FILING DATE: 2001-03-29
NUMBER OF SEQ ID NOS: 1040
SOFTWARE: PatentIn version 3.2
SEQ ID NO 393
LENGTH: 18
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-393

Query Match          91.1%; Score 16.4; DB 12; Length 18;
Best Local Similarity 94.4%; Pred. No. 29;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
DB      1 TCTCCAGCGTGGCCCAT 18

RESULT 25
US-11-127-654-102
Sequence 102, Application US/11127654
Publication No. US20050250726A1
GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
FILE REFERENCE: C1039.70060US01
CURRENT FILING DATE: 2005-05-12
PRIOR FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: US 10/112,653
PRIOR FILING DATE: 2001-03-29
NUMBER OF SEQ ID NOS: 1040
SOFTWARE: PatentIn version 3.2
SEQ ID NO 102
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-102

Query Match          91.1%; Score 16.4; DB 12; Length 20;
Best Local Similarity 94.4%; Pred. No. 29;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
DB      1 TCTCCAGCGTGGCCCAT 18

RESULT 26
US-11-127-654-104
Sequence 104, Application US/11127654
Publication No. US20050250726A1
GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
```

```
APPLICANT: Berg, Daniel J.
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
FILE REFERENCE: C1039.70060US01
CURRENT FILING DATE: 2005-05-12
PRIOR FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: US 10/112,653
PRIOR FILING DATE: 2001-03-29
NUMBER OF SEQ ID NOS: 1040
SOFTWARE: PatentIn version 3.2
SEQ ID NO 104
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-104

Query Match          91.1%; Score 16.4; DB 12; Length 20;
Best Local Similarity 94.4%; Pred. No. 29;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
DB      1 TCTCCAGCGTGGCCCAT 18

RESULT 27
US-11-127-654-105
Sequence 105, Application US/11127654
Publication No. US20050250726A1
GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
FILE REFERENCE: C1039.70060US01
CURRENT FILING DATE: 2005-05-12
PRIOR FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: US 10/112,653
PRIOR FILING DATE: 2001-03-29
NUMBER OF SEQ ID NOS: 1040
SOFTWARE: PatentIn version 3.2
SEQ ID NO 105
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-105

Query Match          91.1%; Score 16.4; DB 12; Length 20;
Best Local Similarity 94.4%; Pred. No. 29;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCCAT 18
        |||||
DB      1 TCTCCAGCGTGGCCCAT 18

RESULT 28
US-10-497-591A-40
Sequence 40, Application US/10497591A
Publication No. US20050250726A1
GENERAL INFORMATION:
APPLICANT: SCHMIDT, WALTER
APPLICANT: SCHELACK, CAROLA
APPLICANT: BEYED, ALENA
APPLICANT: LINGNAVU, KAREN
```

```
/ TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
/ FILE REFERENCE: SONN:045US
/ CURRENT APPLICATION NUMBER: US/10/497,591A
/ CURRENT FILING DATE: 2004-06-03
/ PRIOR APPLICATION NUMBER: PCT/EP02/13791
/ PRIOR FILING DATE: 2002-12-05
/ PRIOR APPLICATION NUMBER: A 1924/2001
/ PRIOR FILING DATE: 2001-12-07
/ NUMBER OF SEQ ID NOS: 113
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 40
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
/ OTHER INFORMATION: Primer
/ FEATURE:
/ NAME/KEY: modified base
/ LOCATION: (10)..(14)
/ OTHER INFORMATION: n = inosine or uracil
US-10-497-591A-40
```

```
Query Match      88.9%; Score 16; DB 8; Length 18;
Best Local Similarity 88.9%; Pred. No. 46;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
         |||||
DB      1 TCTCCAGCGTGGCCAT 18
```

RESULT 29

```
US-11-099-683-133
/ Sequence 133, Application US/11099683
/ Publication No. US2006001916A1
/ GENERAL INFORMATION:
```

```
APPLICANT: Krieg, Arthur
/ TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
/ FILE REFERENCE: C1037.7004US01
/ CURRENT APPLICATION NUMBER: US/11/099,683
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: US 60/558,951
/ PRIOR FILING DATE: 2004-04-02
/ NUMBER OF SEQ ID NOS: 143
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 133
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide
```

```
FEATURE:
/ LOCATION: (9)..(9)
/ OTHER INFORMATION: wherein n is G or a modified G nucleotide
```

```
NAME/KEY: modified_base
/ LOCATION: (9)..(9)
/ OTHER INFORMATION: n is a, c, g, or t
/ FEATURE:
/ NAME/KEY: modified_base
/ LOCATION: (13)..(13)
/ OTHER INFORMATION: wherein n is G or a modified G nucleotide
```

```
FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (13)..(13)
/ OTHER INFORMATION: n is a, c, g, or t
US-11-099-683-133
```

```
Query Match      88.9%; Score 16; DB 12; Length 18;
Best Local Similarity 88.9%; Pred. No. 46;
```

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
QY      1 TCTCCAGCGTGGCCAT 18
         |||||
DB      1 TCTCCAGCGTGGCCAT 18
```

RESULT 30

```
US-11-127-654-395
/ Sequence 395, Application US/11127654
/ Publication No. US20050250726A1
/ GENERAL INFORMATION:
```

```
APPLICANT: Krieg, Arthur M.
/ TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
/ FILE REFERENCE: C1039.7006US01
/ CURRENT APPLICATION NUMBER: US/11/127,654
/ CURRENT FILING DATE: 2005-05-12
/ PRIOR APPLICATION NUMBER: US 10/112,653
/ PRIOR FILING DATE: 2002-03-29
/ PRIOR APPLICATION NUMBER: US 60/279,642
/ PRIOR FILING DATE: 2001-03-29
/ NUMBER OF SEQ ID NOS: 1040
/ SOFTWARE: PatentIn version 3.2
/ SEQ ID NO 395
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide
```

US-11-127-654-395

```
Query Match      82.2%; Score 14.8; DB 12; Length 18;
Best Local Similarity 88.9%; Pred. No. 26+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
         |||||
DB      1 TCTCCAGCGTGGCCAT 18
```

RESULT 31

```
US-11-127-654-396
/ Sequence 396, Application US/11127654
/ Publication No. US20050250726A1
/ GENERAL INFORMATION:
```

```
APPLICANT: Krieg, Arthur M.
/ TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
/ FILE REFERENCE: C1039.7006US01
/ CURRENT APPLICATION NUMBER: US/11/127,654
/ CURRENT FILING DATE: 2005-05-12
/ PRIOR APPLICATION NUMBER: US 10/112,653
/ PRIOR FILING DATE: 2002-03-29
/ PRIOR APPLICATION NUMBER: US 60/279,642
/ PRIOR FILING DATE: 2001-03-29
/ NUMBER OF SEQ ID NOS: 1040
/ SOFTWARE: PatentIn version 3.2
/ SEQ ID NO 396
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide
```

US-11-127-654-396

```
Query Match      82.2%; Score 14.8; DB 12; Length 18;
Best Local Similarity 88.9%; Pred. No. 26+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1 TCTCCAGCGTGGCCAT 18
```

```
Db      1 TCTCCGCGTGGCCAT 18
|||||
RESULT 32
US-11-127-654-101
; Sequence 101, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; PRIOR FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 101
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-101

Query Match      82.2%; Score 14.8; DB 12; Length 20;
Best Local Similarity 88.9%; Pred. No. 2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCCAT 18
|||||
Db      1 TCTCCAGCGTGGCTAT 18
|||||

RESULT 33
US-10-310-914A-241313/c
; Sequence 241313, Application US/10310914A
; Publication No. US20060003322A1
; GENERAL INFORMATION:
; APPLICANT: Bentwich, Isaac
; APPLICANT: Shlier, Kvuzaat
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and
; FILE REFERENCE: 06087.0200.CPUS01
; CURRENT APPLICATION NUMBER: US/10/310,914A
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 1388402
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 241313
; LENGTH: 20
; TYPE: RNA
; ORGANISM: Human
US-10-310-914A-241313

Query Match      80.0%; Score 14.4; DB 8; Length 20;
Best Local Similarity 93.8%; Pred. No. 3.2e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGCC 16
|||||
Db      20 TCTCCAGCGGCGGCC 5
|||||

RESULT 34
US-11-127-654-84
; Sequence 84, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; PRIOR FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 84
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-84

Query Match      77.8%; Score 14; DB 12; Length 16;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      5 CCAGCGTGGCCAT 18
|||||
Db      2 CCAGCGTGGCCAT 15
|||||

RESULT 35
US-11-127-654-394
; Sequence 394, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 394
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-394

Query Match      77.8%; Score 14; DB 12; Length 18;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCTCCAGCGTGGC 14
|||||
Db      1 TCTCCAGCGTGGC 14
|||||

RESULT 36
US-10-310-914A-737406
; Sequence 737406, Application US/10310914A
; Publication No. US20060003322A1
; GENERAL INFORMATION:
; APPLICANT: Bentwich, Isaac
; APPLICANT: Shlier, Kvuzaat
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and
```



```

; TITLE OF INVENTION: uses thereof
; FILE REFERENCE: 06087.0200.CPUS01
; CURRENT APPLICATION NUMBER: US/10/310,914A
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 1388402
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 737406
; LENGTH: 22
; TYPE: RNA
; ORGANISM: Human
US-10-310-914A-737406

Query Match          77.8%; Score 14; DB 8; Length 22;
Best Local Similarity 92.9%; Pred. No. 5.2e+02;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      4 CCCAGCGTGCCCA 17
Db      7 CCCAGCGTGCCCA 20

RESULT 37
US-11-127-654-70
; Sequence 70, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 70
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-70

Query Match          77.8%; Score 14; DB 12; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TCTCCAGCGTCCG 14
Db      1 TCTCCAGCGTCCG 14

RESULT 38
US-10-310-914A-737407
; Sequence 737407, Application US/10310914A
; Publication No. US20060003322A1
; GENERAL INFORMATION:
; APPLICANT: Bentwich, Isaac
; APPLICANT: Shlier, Kuvzac
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and
; TITLE OF INVENTION: uses thereof
; FILE REFERENCE: 06087.0200.CPUS01
; CURRENT APPLICATION NUMBER: US/10/310,914A
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 1388402
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 737407
; LENGTH: 24
; TYPE: RNA
```

```

; ORGANISM: Human
US-10-310-914A-737407

Query Match          77.8%; Score 14; DB 8; Length 24;
Best Local Similarity 92.9%; Pred. No. 5.2e+02;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      4 CCCAGCGTGCCCA 17
Db      7 CCCAGCGTGCCCA 20

RESULT 39
US-11-127-654-75
; Sequence 75, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 75
; LENGTH: 24
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-75

Query Match          77.8%; Score 14; DB 12; Length 24;
Best Local Similarity 100.0%; Pred. No. 5.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      5 CCAGCGTGCCCAT 18
Db      6 CCAGCGTGCCCAT 19

RESULT 40
US-10-310-914A-1293135
; Sequence 1293135, Application US/10310914A
; Publication No. US20060003322A1
; GENERAL INFORMATION:
; APPLICANT: Bentwich, Isaac
; APPLICANT: Shlier, Kuvzac
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and
; TITLE OF INVENTION: uses thereof
; FILE REFERENCE: 06087.0200.CPUS01
; CURRENT APPLICATION NUMBER: US/10/310,914A
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 1388402
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1293135
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Human
US-10-310-914A-1293135

Query Match          76.7%; Score 13.8; DB 8; Length 21;
Best Local Similarity 70.6%; Pred. No. 6.6e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy      2 CTCCAGCGTGCCCAT 18
Db      1 CTCCAGCGTGCCCAT 18
```

Db 4 CUCCAGCCUGGGCCAU 20

## RESULT 41

US-10-310-914A-1293147  
; Sequence 1293147, Application US/10310914A  
; Publication No. US20060003322A1  
; GENERAL INFORMATION:  
; APPLICANT: Benitich, Isaac  
; APPLICANT: Shiler, Kuvzat  
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and  
; FILE REFERENCE: 06087.0200.CPUS01  
; CURRENT APPLICATION NUMBER: US/10/310,914A  
; CURRENT FILING DATE: 2002-12-06  
; NUMBER OF SEQ ID NOS: 1388402  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 1293147  
; LENGTH: 21  
; TYPE: RNA  
; ORGANISM: Human  
US-10-310-914A-1293147

Query Match 76.7%; Score 13.8; DB 8; Length 21;  
Best Local Similarity 70.6%; Pred. No. 6.6e+02;  
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 2 CTCGCCAGCGTGGCCAT 18

Db 5 CUCCAGCCUGGGCCAU 21

## RESULT 42

US-11-121-849-517192/c  
; Sequence 517192, Application US/11121849  
; Publication No. US20050272080A1  
; GENERAL INFORMATION:  
; APPLICANT: John Palma  
; TITLE OF INVENTION: Methods of Genetic Analysis of Formalin Fixed Paraffin Embedded S  
; FILE REFERENCE: 3684.1  
; CURRENT APPLICATION NUMBER: US/11/121,849  
; CURRENT FILING DATE: 2005-05-03  
; PRIOR APPLICATION NUMBER: 60/567,949  
; PRIOR FILING DATE: 2004-05-03  
; NUMBER OF SEQ ID NOS: 673904  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 517192  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Homo sapien  
US-11-121-849-517192

Query Match 76.7%; Score 13.8; DB 12; Length 25;  
Best Local Similarity 88.2%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCA 17

Db 25 TCTCCAGAGTGCTCCA 9

## RESULT 43

US-10-619-279-71  
; Sequence 71, Application US/10619279  
; Publication No. US20050267057A1  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules  
; FILE REFERENCE: C1039/7023/HCL  
; CURRENT APPLICATION NUMBER: US/10/619,279  
; CURRENT FILING DATE: 2003-07-14  
; PRIOR APPLICATION NUMBER: US 08/960,774

; PRIOR FILING DATE: 1997-10-30  
; PRIOR APPLICATION NUMBER: US 08/738,652  
; PRIOR FILING DATE: 1996-10-30  
; PRIOR APPLICATION NUMBER: US 08/386,063  
; PRIOR FILING DATE: 1995-02-07  
; PRIOR APPLICATION NUMBER: US 08/276,358  
; PRIOR FILING DATE: 1994-07-15  
; NUMBER OF SEQ ID NOS: 123  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 71  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide  
US-10-619-279-71

Query Match 74.4%; Score 13.4; DB 8; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCG 15

Db 1 TCTCCAGCGGGCGC 15

## RESULT 44

US-11-127-654-71  
; Sequence 71, Application US/11127654  
; Publication No. US20050250726A1  
; GENERAL INFORMATION:  
; APPLICANT: Kriegl, Arthur M.  
; APPLICANT: Berg, Daniel J.  
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC  
; FILE REFERENCE: C1039.70060US01  
; CURRENT APPLICATION NUMBER: US/11/127,654  
; CURRENT FILING DATE: 2005-05-12  
; PRIOR APPLICATION NUMBER: US 10/112,653  
; PRIOR FILING DATE: 2002-03-29  
; PRIOR APPLICATION NUMBER: US 60/279,642  
; PRIOR FILING DATE: 2001-03-29  
; NUMBER OF SEQ ID NOS: 1040  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 71  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide  
US-11-127-654-71

Query Match 74.4%; Score 13.4; DB 12; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCG 15

Db 1 TCTCCAGCGGGCGC 15

## RESULT 45

US-10-497-591A-54  
; Sequence 54, Application US/10497591A  
; Publication No. US20050250716A1  
; GENERAL INFORMATION:  
; APPLICANT: SCHMIDT, WALTER  
; APPLICANT: SCHMIDT, CAROLA  
; APPLICANT: BEYED, ALENA  
; APPLICANT: LINGNAU, KAREN  
; TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES  
; FILE REFERENCE: SONN.045US  
; CURRENT APPLICATION NUMBER: US/10/497,591A

```
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: PCT/EP02/13791
; PRIOR FILING DATE: 2002-12-05
; PRIOR APPLICATION NUMBER: A 1924/2001
; PRIOR FILING DATE: 2001-12-07
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 54
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; NAME/KEY: modified base
; LOCATION: (10)..(14)
; OTHER INFORMATION: n = inosine or uracil
US-10-497-591A-54
```

```
Query Match          74.4%; Score 13.4; DB 8; Length 18;
Best Local Similarity 77.8%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

```
OY      1 TCTCCAGCGTGGCCAT 18
         |||||
Db       1 TCTCCAGCNCNCNCAT 18
```

```
RESULT 46
US-10-310-914A-919681
; Sequence 919681, Application US/10310914A
; Publication No. US20060003322A1
; GENERAL INFORMATION:
; APPLICANT: Bentwich, Isaac
; APPLICANT: Shiller, Kiyazat
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and
; TITLE OF INVENTION: uses thereof
; FILE REFERENCE: 06087.0200.CPUS01
; CURRENT APPLICATION NUMBER: US/10/310.914A
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 1388402
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 919681
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Human
US-10-310-914A-919681
```

```
Query Match          74.4%; Score 13.4; DB 8; Length 21;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
OY      2 CTCACGAGCGTGGCC 16
         |||||
Db       2 CUCCACGCGUGGCC 16
```

```
RESULT 47
US-10-310-914A-1103795/c
; Sequence 1103795, Application US/10310914A
; Publication No. US20060003322A1
; GENERAL INFORMATION:
; APPLICANT: Bentwich, Isaac
; APPLICANT: Shiller, Kiyazat
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and
; TITLE OF INVENTION: uses thereof
; FILE REFERENCE: 06087.0200.CPUS01
; CURRENT APPLICATION NUMBER: US/10/310.914A
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 1388402
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1103795
```

```
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Human
US-10-310-914A-1103795
```

```
Query Match          73.3%; Score 13.2; DB 8; Length 19;
Best Local Similarity 83.3%; Pred. No. 1.3e+03;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
OY      1 TCTCCAGCGTGGCCAT 18
         |||||
Db       19 TCACCCAGCGTGAGCCAT 2
```

```
RESULT 48
US-11-127-654-103
; Sequence 103, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 103
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-103
```

```
Query Match          73.3%; Score 13.2; DB 12; Length 20;
Best Local Similarity 83.3%; Pred. No. 1.4e+03;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
OY      1 TCTCCAGCGTGGCCAT 18
         |||||
Db       1 TCTGCGTGGCGGCCAT 18
```

```
RESULT 49
US-11-121-849-215641
; Sequence 215641, Application US/11121849
; Publication No. US20050272080A1
; GENERAL INFORMATION:
; APPLICANT: John Palma
; TITLE OF INVENTION: Methods of Genetic Analysis of Formalin Fixed Paraffin Embedded S
; TITLE OF INVENTION: Microarrays
; FILE REFERENCE: 3684.1
; CURRENT APPLICATION NUMBER: US/11/121,849
; CURRENT FILING DATE: 2005-05-03
; PRIOR APPLICATION NUMBER: 60/567,949
; PRIOR FILING DATE: 2004-05-03
; NUMBER OF SEQ ID NOS: 673904
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 215641
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapien
US-11-121-849-215641
```

```
Query Match          73.3%; Score 13.2; DB 12; Length 25;
Best Local Similarity 83.3%; Pred. No. 1.4e+03;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

Qy 1 TCTCCAGCGTGCGCCAT 18  
 Db 7 TCTCCAGCATCCGCTT 24

RESULT 50  
 US-10-310-914A-737408  
 ; Sequence 737408, Application US/10310914A  
 ; Publication No. US20060003322A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bentwich, Isaac  
 ; APPLICANT: Shiller, Kiyazat  
 ; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and  
 ; FILE REFERENCE: 06087.0200.CPUS01  
 ; CURRENT APPLICATION NUMBER: US/10/310, 914A  
 ; CURRENT FILING DATE: 2002-12-06  
 ; NUMBER OF SEQ ID NOS: 138402  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 737408  
 ; LENGTH: 24  
 ; TYPE: RNA  
 ; ORGANISM: Human  
 US-10-310-914A-737408

Query Match 72.2%; Score 13; DB 8; Length 24;  
 Best Local Similarity 92.3%; Pred. No. 1.7e+03;  
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4 CCCAGCGTGCGCC 16  
 Db 12 CCCAGCGUGGCC 24

Search completed: February 17, 2006, 20:23:28  
 Job time : 509 secs

GenCore version 5.1.7  
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM nucleic - nucleic search, using sw model

Run on: February 17, 2006, 19:19:44 ; Search time 1677 Seconds  
(without alignments)  
610.126 Million cell updates/sec

Title: US-10-822-205-1

Perfect score: 18  
Sequence: 1 tctccagcgcgcgcacat 18

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 5883141 seqs, 28421725653 residues

Total number of hits satisfying chosen parameters: 1641224

Minimum DB seq length: 0  
Maximum DB seq length: 30

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database : GenEmbl:\*  
1: gb\_ba:\*  
2: gb\_in:\*  
3: gb\_env:\*  
4: gb\_om:\*  
5: gb\_ov:\*  
6: gb\_pat:\*  
7: gb\_ph:\*  
8: gb\_pr:\*  
9: gb\_ro:\*  
10: gb\_scs:\*  
11: gb\_sy:\*  
12: gb\_un:\*  
13: gb\_vl:\*  
14: gb\_hcg:\*  
15: gb\_pl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	18	100.0	18	6	AR052619 Sequence
2	18	100.0	18	6	AR052624 Sequence
3	18	100.0	18	6	AR116926 Sequence
4	18	100.0	18	6	AR140496 Sequence
5	18	100.0	18	6	AR146347 Sequence
6	18	100.0	18	6	AR146392 Sequence
7	18	100.0	18	6	AR154716 Sequence
8	18	100.0	18	6	AR167448 Sequence
9	18	100.0	18	6	BD069938 Use of nu
10	18	100.0	18	6	BD076451 Combined
11	18	100.0	18	6	BD080525 Ribonucle
12	18	100.0	18	6	BD106497 High effi
13	18	100.0	18	6	BD187532 REGULATIO
14	18	100.0	18	6	BD190420 Microemul
15	18	100.0	18	6	BD192469 Compositi
16	18	100.0	18	6	BD205569 Method of
17	18	100.0	18	6	BD205614 Method of
18	18	100.0	18	6	BD222609 Compositi

19	18	100.0	18	6	BD228692 Methods a
20	18	100.0	18	6	BD247888 Antisense
21	18	100.0	18	6	BD251268 Enhanceme
22	18	100.0	18	6	BD261111 Methods a
23	18	100.0	18	6	BD261156 Methods a
24	18	100.0	18	6	BD261272 Methods a
25	18	100.0	18	6	BD261561 Vaccine.
26	18	100.0	18	6	BD267876 Methods f
27	18	100.0	18	6	BD267916 Methods f
28	18	100.0	18	6	BD270778 Stereoiso
29	18	100.0	18	6	CQ788114 Sequence
30	18	100.0	18	6	CQ788200 Sequence
31	18	100.0	18	6	CQ815136 Sequence
32	18	100.0	18	6	CQ832954 Sequence
33	18	100.0	18	6	CQ832954 Sequence
34	18	100.0	18	6	CQ832954 Sequence
35	18	100.0	18	6	CQ832954 Sequence
36	18	100.0	18	6	CS057844 Sequence
37	18	100.0	18	6	CS080249 Sequence
38	18	100.0	18	6	CS083014 Sequence
39	18	100.0	18	6	CS088752 Sequence
40	18	100.0	18	6	CS110648 Sequence
41	18	100.0	18	6	CS124144 Sequence
42	18	100.0	18	6	CS124144 Sequence
43	18	100.0	18	6	AR222219 Sequence
44	18	100.0	18	6	AR222219 Sequence
45	18	100.0	18	6	AR222219 Sequence
46	18	100.0	18	6	AR303119 Sequence
47	18	100.0	18	6	AR309880 Sequence
48	18	100.0	18	6	AR359625 Sequence
49	18	100.0	18	6	AR432468 Sequence
50	18	100.0	18	6	AR577305 Sequence
51	18	100.0	18	6	AR608703 Sequence
52	18	100.0	18	6	AR628554 Sequence
53	18	100.0	18	6	AR630683 Sequence
54	18	100.0	18	6	AR639919 Sequence
55	18	100.0	18	6	AR643610 Sequence
56	18	100.0	18	6	AR653977 Sequence
57	18	100.0	18	6	AR653977 Sequence
58	18	100.0	18	6	AX015198 Sequence
59	18	100.0	18	6	AX020948 Sequence
60	18	100.0	18	6	AX020954 Sequence
61	18	100.0	18	6	AX040169 Sequence
62	18	100.0	18	6	AX040403 Sequence
63	18	100.0	18	6	AX063576 Sequence
64	18	100.0	18	6	AX081353 Sequence
65	18	100.0	18	6	AX083693 Sequence
66	18	100.0	18	6	AX088930 Sequence
67	18	100.0	18	6	AX103809 Sequence
68	18	100.0	18	6	AX103862 Sequence
69	18	100.0	18	6	AX103863 Sequence
70	18	100.0	18	6	AX103899 Sequence
71	18	100.0	18	6	AX105211 Sequence
72	18	100.0	18	6	AX135635 Sequence
73	18	100.0	18	6	AX283183 Sequence
74	18	100.0	18	6	AX283250 Sequence
75	18	100.0	18	6	AX355727 Sequence
76	18	100.0	18	6	AX355728 Sequence
77	18	100.0	18	6	AX455638 Sequence
78	18	100.0	18	6	AX468484 Sequence
79	18	100.0	18	6	AX497778 Sequence
80	18	100.0	18	6	AX513618 Sequence
81	18	100.0	18	6	AX513688 Sequence
82	18	100.0	18	6	AX513709 Sequence
83	18	100.0	18	6	AX513710 Sequence
84	18	100.0	18	6	AX537410 Sequence
85	18	100.0	18	6	AX546862 Sequence
86	18	100.0	18	6	AX546915 Sequence
87	18	100.0	18	6	AX546916 Sequence
88	18	100.0	18	6	AX546952 Sequence
89	18	100.0	18	6	AX593887 Sequence
90	18	100.0	18	6	AX593888 Sequence
91	18	100.0	18	6	AX671088 Sequence
	18	100.0	18	6	AX786560 Sequence

92	18	100.0	18	6	AX797646	AX797646 Sequence	165	14.8	82.2	18	6	AX547269	AX547269 Sequence
93	18	100.0	18	6	AX797661	AX797661 Sequence	166	14.8	82.2	18	6	AX547270	AX547270 Sequence
94	18	100.0	18	6	AX957630	AX957630 Sequence	167	14.8	82.2	20	6	AX103916	AX103916 Sequence
95	18	100.0	18	6	AX957645	AX957645 Sequence	168	14.8	82.2	20	6	AX355732	AX355732 Sequence
96	18	100.0	18	6	AX957724	AX957724 Sequence	169	14.8	82.2	20	6	AX546969	AX546969 Sequence
97	18	100.0	18	6	AX957739	AX957739 Sequence	170	14	77.8	16	6	CS124099	CS124099 Sequence
98	18	100.0	18	6	AX958129	AX958129 Sequence	171	14	77.8	16	6	CS124135	CS124135 Sequence
99	18	100.0	18	6	AX958144	AX958144 Sequence	172	14	77.8	16	6	CS124138	CS124138 Sequence
100	18	100.0	18	6	BD009103	BD009103 Immunost.	173	14	77.8	16	6	AX103898	AX103898 Sequence
101	18	100.0	18	6	AR608704	AR608704 Sequence	174	14	77.8	16	6	AX355055	AX355055 Sequence
102	18	100.0	18	6	AR608705	AR608705 Sequence	175	14	77.8	16	6	AX546951	AX546951 Sequence
103	18	100.0	19	6	AX083694	AX083694 Sequence	176	14	77.8	17	6	CS124132	CS124132 Sequence
104	18	100.0	19	6	AX083695	AX083695 Sequence	177	14	77.8	17	6	CS124133	CS124133 Sequence
105	18	100.0	20	6	AR182888	AR182888 Sequence	178	14	77.8	17	6	196091	
106	18	100.0	20	6	AR607451	AR607451 Sequence	179	14	77.8	18	6	CS124091	CS124091 Sequence
107	18	100.0	20	6	AX103895	AX103895 Sequence	180	14	77.8	18	6	CS124092	CS124092 Sequence
108	18	100.0	20	6	AX355729	AX355729 Sequence	181	14	77.8	18	6	CS124095	CS124095 Sequence
109	18	100.0	20	6	AX546948	AX546948 Sequence	182	14	77.8	18	6	AX104215	AX104215 Sequence
110	18	100.0	23	6	AR608697	AR608697 Sequence	183	14	77.8	18	6	AX355733	AX355733 Sequence
111	18	100.0	23	6	AR608698	AR608698 Sequence	184	14	77.8	18	6	AX547268	AX547268 Sequence
112	18	100.0	23	6	AX083687	AX083687 Sequence	185	14	77.8	20	6	AX045387	AX045387 Sequence
113	18	100.0	23	6	AX083688	AX083688 Sequence	186	14	77.8	22	6	AX103884	AX103884 Sequence
114	18	100.0	26	6	CS019648	CS019648 Sequence	187	14	77.8	22	6	AX355731	AX355731 Sequence
115	18	100.0	27	6	AR004426	AR004426 Sequence	188	14	77.8	22	6	AX546937	AX546937 Sequence
116	18	100.0	27	6	143661	143661 Sequence	189	14	77.8	24	6	AX103889	AX103889 Sequence
117	18	100.0	27	6	186720	186720 Sequence	190	14	77.8	24	6	AX355412	AX355412 Sequence
118	18	100.0	30	6	CQ859706	CQ859706 Sequence	191	14	77.8	24	6	AX546942	AX546942 Sequence
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120	16.4	91.1	18	6	AR146360	AR146360 Sequence	193	13.4	74.4	17	6	AR154742	AR154742 Sequence
121	16.4	91.1	18	6	AR154743	AR154743 Sequence	194	13.4	74.4	17	6	BD069951	BD069951 Sequence
122	16.4	91.1	18	6	BD069952	BD069952 Use of nu	195	13.4	74.4	17	6	BD205581	BD205581 Sequence
123	16.4	91.1	18	6	BD069971	BD069971 Use of nu	196	13.4	74.4	17	6	BD261123	BD261123 Sequence
124	16.4	91.1	18	6	BD205582	BD205582 Method of	197	13.4	74.4	17	6	BD261282	BD261282 Methods a
125	16.4	91.1	18	6	BD261124	BD261124 Methods a	198	13.4	74.4	17	6	BD267887	BD267887 Methods f
126	16.4	91.1	18	6	BD267888	BD267888 Methods f	199	13.4	74.4	17	6	BD270788	BD270788 Stereoiso
127	16.4	91.1	18	6	AR222232	AR222232 Sequence	200	13.4	74.4	17	6	CQ892018	CQ892018 Sequence
128	16.4	91.1	18	6	AR432493	AR432493 Sequence	201	13.4	74.4	17	6	AR213861	AR213861 Sequence
129	16.4	91.1	18	6	AX103886	AX103886 Sequence	202	13.4	74.4	17	6	AR222231	AR222231 Sequence
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133	16.4	91.1	18	6	AX355723	AX355723 Sequence	206	13.4	74.4	17	6	AX355724	AX355724 Sequence
134	16.4	91.1	18	6	AX355725	AX355725 Sequence	207	13.4	74.4	17	6	AX545637	AX545637 Sequence
135	16.4	91.1	18	6	AX455636	AX455636 Sequence	208	13.4	74.4	17	6	AX546938	AX546938 Sequence
136	16.4	91.1	18	6	AX546939	AX546939 Sequence	209	13.4	74.4	17	6	AX786570	AX786570 Sequence
137	16.4	91.1	18	6	AX546940	AX546940 Sequence	210	13.4	74.4	17	6	BD009127	BD009127 Immunost.
138	16.4	91.1	18	6	AX547267	AX547267 Sequence	211	13.4	74.4	18	6	CS124114	CS124114 Sequence
139	16.4	91.1	18	6	BD009126	BD009126 Immunost.	212	13.4	74.4	18	6	CS124115	CS124115 Sequence
140	16.4	91.1	20	6	AX103917	AX103917 Sequence	213	13.4	74.4	18	6	CS124116	CS124116 Sequence
141	16.4	91.1	20	6	AX103919	AX103919 Sequence	214	13.4	74.4	18	6	CS124141	CS124141 Sequence
142	16.4	91.1	20	6	AX103920	AX103920 Sequence	215	13.4	74.4	18	6	CS124142	CS124142 Sequence
143	16.4	91.1	20	6	AX355730	AX355730 Sequence	216	13.4	74.4	18	6	CS124143	CS124143 Sequence
144	16.4	91.1	20	6	AX355738	AX355738 Sequence	217	13.2	73.3	19	6	CQ974480	CQ974480 Sequence
145	16.4	91.1	20	6	AX355739	AX355739 Sequence	218	13.2	73.3	19	6	CQ974569	CQ974569 Sequence
146	16.4	91.1	20	6	AX546970	AX546970 Sequence	219	13.2	73.3	20	6	AX103918	AX103918 Sequence
147	16.4	91.1	20	6	AX546972	AX546972 Sequence	220	13.2	73.3	20	6	AX355741	AX355741 Sequence
148	16.4	91.1	20	6	AX546973	AX546973 Sequence	221	13.2	73.3	20	6	CS124126	CS124126 Sequence
149	16	88.9	18	6	CS124089	CS124089 Sequence	222	13	72.2	15	6	CS124096	CS124096 Sequence
150	15	83.3	17	6	CS124129	CS124129 Sequence	223	13	72.2	16	6	CS124097	CS124097 Sequence
151	15	83.3	17	6	196089	196089 Sequence	224	13	72.2	16	6	CS124098	CS124098 Sequence
152	15	83.3	18	6	CS124090	CS124090 Sequence	225	13	72.2	16	6	CS124136	CS124136 Sequence
153	15	83.3	18	6	CS124093	CS124093 Sequence	226	13	72.2	17	6	CS124130	CS124130 Sequence
154	15	83.3	18	6	CS124094	CS124094 Sequence	227	13	72.2	18	6	BD008994	BD008994 Inhibiti
155	15	83.3	19	6	AR643614	AR643614 Sequence	228	13	72.2	18	6	AR052603	AR052603 Sequence
156	15	83.3	22	6	AR6123	AR6123 Sequence	229	13	72.2	20	6	AR052609	AR052609 Sequence
157	15	83.3	22	6	AR6124	AR6124 Sequence	230	13	72.2	20	6	AR176022	AR176022 Sequence
158	14.8	82.2	18	6	CQ897432	CQ897432 Sequence	231	13	72.2	20	6	AR176023	AR176023 Sequence
159	14.8	82.2	18	6	CQ897869	CQ897869 Sequence	232	13	72.2	20	6	BD187522	BD187522 REGULA
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161	14.8	82.2	18	6	AX104216	AX104216 Sequence	234	13	72.2	20	6	196088	196088 Sequence
162	14.8	82.2	18	6	AX104217	AX104217 Sequence	235	13	72.2	20	6	AR630667	AR630667 Sequence
163	14.8	82.2	18	6	AX355736	AX355736 Sequence	236	13	72.2	20	6	AR630673	AR630673 Sequence
164	14.8	82.2	18	6	AX355737	AX355737 Sequence	237	13	72.2	20	6		

C 238	13	72.2	20	6	AX211669	Sequence	311	11.4	63.3	22	6	AX019581	Sequence
239	13	72.2	20	6	AX211670	Sequence	312	11.4	63.3	24	6	AX289062	Sequence
240	13	72.2	20	6	AX277461	Sequence	313	11.4	63.3	24	6	AX292054	Sequence
241	13	72.2	29	6	BD076453	Combined	314	11.4	63.3	27	6	AX118508	Sequence
242	12.4	68.9	20	6	AX295095	Sequence	315	11.2	62.2	20	6	AS8159	Sequence
243	12.4	68.9	22	6	AX103983	Sequence	316	11.2	62.2	20	6	BD183167	Sequence
244	12.4	68.9	22	6	AX355721	Sequence	317	11.2	62.2	20	6	AR612314	Sequence
245	12.4	68.9	22	6	AX547036	Sequence	318	11.2	62.2	20	6	AX295220	Sequence
246	12.4	68.9	22	6	AX290462	Sequence	319	11.2	62.2	20	6	AX463650	Sequence
247	12.2	67.8	20	6	AR243591	Sequence	320	11.2	62.2	20	6	AX643079	Sequence
C 248	12.2	67.8	21	6	BD070773	Method to	321	11.2	62.2	21	6	AR576961	Sequence
C 249	12.2	67.8	21	6	AR307343	Sequence	322	11.2	62.2	24	6	CQ778056	Sequence
C 250	12.2	67.8	22	6	CQ867405	Sequence	323	11.2	62.2	24	6	I08915	Sequence
C 251	12.2	67.8	30	6	AX463644	Sequence	324	11.2	62.2	24	6	I65283	Sequence
252	12	66.7	13	6	CS124125	Sequence	325	11.2	62.2	24	6	AX290587	Sequence
253	12	66.7	14	6	CS124124	Sequence	326	11.2	62.2	24	6	AX46880	Sequence
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261	12	66.7	17	6	CS124134	Sequence	334	11.2	62.2	26	6	CS086034	Sequence
262	12	66.7	27	6	AR279801	Sequence	335	11.2	62.2	30	6	AR649207	Sequence
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265	11.8	65.6	20	6	AX011319	Sequence	338	11	61.1	11	6	AR146357	Sequence
266	11.8	65.6	22	6	AR606329	Sequence	339	11	61.1	12	6	AR154740	Sequence
267	11.8	65.6	22	6	AX705322	Sequence	340	11	61.1	12	6	BD069949	Sequence
C 268	11.8	65.6	24	6	CQ876947	Sequence	341	11	61.1	12	6	BD205579	Method of
C 269	11.8	65.6	26	6	AR641337	Sequence	342	11	61.1	12	6	BD261121	Methods a
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271	11.8	65.6	27	6	B65173	Method for	344	11	61.1	12	6	BD267885	Methods f
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273	11.8	65.6	27	6	AR340194	Sequence	346	11	61.1	12	6	CQ892016	Sequence
274	11.8	65.6	27	6	AR615793	Sequence	347	11	61.1	12	6	AR23859	Sequence
275	11.8	65.6	30	6	BD015580	Herbicide	348	11	61.1	12	6	AR232229	Sequence
C 276	11.8	65.6	30	6	AR641333	Sequence	349	11	61.1	12	6	AR222229	Sequence
277	11.6	64.4	18	6	BD076450	Combined	350	11	61.1	12	6	AR324490	Sequence
278	11.6	64.4	18	6	BD076452	Combined	351	11	61.1	12	6	AX103879	Sequence
279	11.6	64.4	18	6	CQ830286	Sequence	352	11	61.1	12	6	AX105175	Sequence
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C 284	11.6	64.4	25	6	AX689294	Sequence	357	11	61.1	12	6	BD009123	Immunost
C 285	11.6	64.4	25	6	AX689295	Sequence	358	11	61.1	13	6	CS124128	Sequence
C 286	11.6	64.4	25	6	AX689296	Sequence	359	11	61.1	16	6	CS124140	Sequence
C 287	11.6	64.4	25	6	AX689297	Sequence	360	11	61.1	17	6	I96092	Sequence
C 288	11.6	64.4	25	6	AX689298	Sequence	361	11	61.1	17	6	AX104223	Sequence
C 289	11.6	64.4	25	6	AX689299	Sequence	362	11	61.1	17	6	AX285479	Sequence
C 290	11.6	64.4	25	6	AX689300	Sequence	363	11	61.1	17	6	AX265480	Sequence
C 291	11.6	64.4	25	6	BD021949	Preparati	364	11	61.1	17	6	AX355726	Sequence
292	11.6	64.4	27	6	BD142864	Novel pol	365	11	61.1	17	6	AX547276	Sequence
C 293	11.6	64.4	28	6	AR090356	Sequence	366	11	61.1	20	6	AX293838	Sequence
C 294	11.6	64.4	28	6	AR197391	Sequence	367	11	61.1	20	6	AX397656	Sequence
C 295	11.6	64.4	28	6	AR259545	Sequence	368	11	61.1	21	6	AX103915	Sequence
296	11.6	64.4	29	6	CQ867577	Sequence	369	11	61.1	21	6	AX355734	Sequence
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298	11.4	63.3	15	6	CS124121	Sequence	371	11	61.1	24	6	AX289205	Sequence
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301	11.4	63.3	16	6	CS124109	Sequence	374	11	61.1	25	6	AR390555	Sequence
302	11.4	63.3	16	6	CS124112	Sequence	375	11	61.1	25	6	AR393169	Sequence
303	11.4	63.3	16	6	CS124113	Sequence	376	11	61.1	25	6	AR810460	Sequence
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305	11.4	63.3	20	6	AX293695	Sequence	378	11	61.1	27	6	AR636786	Sequence
306	11.4	63.3	20	6	AX293687	Sequence	379	11	61.1	29	6	BD076454	Combined
307	11.4	63.3	21	6	AR091639	Sequence	380	11	61.1	30	6	AR226400	Sequence
308	11.4	63.3	21	6	AR091649	Sequence	381	11	61.1	30	6	AR404040	Sequence
309	11.4	63.3	21	6	CS085937	Sequence	382	11	61.1	30	6	AX300428	Sequence
310	11.4	63.3	22	6	BD225832	Promoter	383	10.8	60.0	17	6	AX723460	Sequence

384	10.8	60.0	18	6	BD247887	BD247887 Antlence	C 457	10.6	58.9	25	6	AX689292	AX689292 Sequence
385	10.8	60.0	18	6	AR494788	AR494788 Sequence	C 458	10.6	58.9	25	6	AX689301	AX689301 Sequence
386	10.8	60.0	18	6	AR561052	AR561052 Sequence	C 459	10.6	58.9	26	6	BD181143	BD181143 Human DNA
387	10.8	60.0	18	6	AX460270	AX460270 Sequence	C 460	10.6	58.9	26	6	BD262736	BD262736 Informati
388	10.8	60.0	18	6	AX764072	AX764072 Sequence	C 461	10.6	58.9	26	6	AR217710	AR217710 Sequence
389	10.8	60.0	19	6	AR494787	AR494787 Sequence	C 462	10.6	58.9	26	6	AR382068	AR382068 Sequence
390	10.8	60.0	19	6	AR561051	AR561051 Sequence	C 463	10.6	58.9	26	6	AX038159	AX038159 Sequence
391	10.8	60.0	20	6	AR117687	AR117687 Sequence	C 464	10.6	58.9	27	6	AR670341	AR670341 Sequence
392	10.8	60.0	20	6	AR215935	AR215935 Sequence	C 465	10.6	58.9	27	6	AX224136	AX224136 Sequence
393	10.8	60.0	20	6	AR494786	AR494786 Sequence	C 466	10.6	58.9	28	6	AR055231	AR055231 Sequence
394	10.8	60.0	20	6	AR561050	AR561050 Sequence	C 467	10.6	58.9	29	6	BD187120	BD187120 Novel pro
395	10.8	60.0	20	6	AR635269	AR635269 Sequence	C 468	10.6	58.9	29	6	BD231190	BD231190 Plants an
396	10.8	60.0	20	6	AX293371	AX293371 Sequence	C 469	10.6	58.9	29	6	AR343574	AR343574 Sequence
397	10.8	60.0	20	6	AX539251	AX539251 Sequence	C 470	10.6	58.9	29	6	AR409109	AR409109 Sequence
398	10.8	60.0	20	6	BD165657	BD165657 Genes and	C 471	10.6	58.9	29	6	AR581440	AR581440 Sequence
399	10.8	60.0	21	6	CQ859906	CQ859906 Sequence	C 472	10.6	58.9	29	6	AX18216	AX18216 Sequence
400	10.8	60.0	21	6	CQ876488	CQ876488 Sequence	C 473	10.6	58.9	30	6	AR031177	AR031177 Sequence
401	10.8	60.0	21	6	CQ979170	CQ979170 Sequence	C 474	10.6	58.9	30	6	AR042582	AR042582 Sequence
402	10.8	60.0	21	6	AR240900	AR240900 Sequence	C 475	10.6	58.9	30	6	AR059275	AR059275 Sequence
403	10.8	60.0	21	6	AR494785	AR494785 Sequence	C 476	10.6	58.9	30	6	AR076253	AR076253 Sequence
404	10.8	60.0	21	6	AR561049	AR561049 Sequence	C 477	10.6	58.9	30	6	AR437142	AR437142 Sequence
405	10.8	60.0	24	6	AR615320	AR615320 Sequence	C 478	10.6	58.9	30	6	AR584755	AR584755 Sequence
406	10.8	60.0	24	6	AX288738	AX288738 Sequence	C 479	10.6	58.9	30	6	AX234579	AX234579 Sequence
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408	10.8	60.0	25	6	A23837	A23837 Artificial D	C 481	10.6	58.9	30	6	AX241419	AX241419 Sequence
409	10.8	60.0	25	6	AR011661	AR011661 Sequence	C 482	10.4	57.8	13	6	CS124118	CS124118 Sequence
410	10.8	60.0	25	6	I68665	I68665 Sequence 30	C 483	10.4	57.8	14	6	CS124121	CS124121 Sequence
411	10.8	60.0	25	6	AR182410	AR182410 Sequence	C 484	10.4	57.8	14	6	CS124117	CS124117 Sequence
412	10.8	60.0	25	6	AR184027	AR184027 Sequence	C 485	10.4	57.8	15	6	CS124105	CS124105 Sequence
413	10.8	60.0	25	6	AR342612	AR342612 Sequence	C 486	10.4	57.8	16	6	CS124106	CS124106 Sequence
414	10.8	60.0	25	6	AX174854	AX174854 Sequence	C 487	10.4	57.8	16	6	CS124110	CS124110 Sequence
415	10.8	60.0	25	6	AX250187	AX250187 Sequence	C 488	10.4	57.8	17	6	BD254745	BD254745 Sequence
416	10.8	60.0	26	6	BD175920	BD175920 Regulatio	C 489	10.4	57.8	17	6	AR564580	AR564580 Sequence
417	10.8	60.0	26	6	AR202585	AR202585 Sequence	C 490	10.4	57.8	17	6	AX216146	AX216146 Sequence
418	10.8	60.0	26	6	AR202585	AR202585 Sequence	C 491	10.4	57.8	17	6	AX216392	AX216392 Sequence
419	10.8	60.0	26	6	AR369450	AR369450 Sequence	C 492	10.4	57.8	17	6	AX216393	AX216393 Sequence
420	10.8	60.0	26	6	AR400919	AR400919 Sequence	C 493	10.4	57.8	17	6	AX724319	AX724319 Sequence
421	10.8	60.0	26	6	AR486472	AR486472 Sequence	C 494	10.4	57.8	19	6	CQ876519	CQ876519 Sequence
422	10.8	60.0	26	6	AR615289	AR615289 Sequence	C 495	10.4	57.8	19	6	CQ975266	CQ975266 Sequence
423	10.8	60.0	26	6	BD000253	BD000253 Oligonuc	C 496	10.4	57.8	19	6	AX155585	AX155585 Sequence
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425	10.8	60.0	27	6	AR166938	AR166938 Sequence	C 498	10.4	57.8	20	6	AR007126	AR007126 Sequence
426	10.8	60.0	28	6	AR343224	AR343224 Sequence	C 499	10.4	57.8	20	6	AR011695	AR011695 Sequence
427	10.8	60.0	28	6	AR102314	AR102314 Sequence	C 500	10.4	57.8	20	6	AR092295	AR092295 Sequence
428	10.8	60.0	29	6	AR176009	AR176009 Sequence	C 501	10.4	57.8	20	6	AR119512	AR119512 Sequence
429	10.8	60.0	29	6	BD171715	BD171715 N-Acylami	C 502	10.4	57.8	20	6	AR119540	AR119540 Sequence
430	10.8	60.0	30	6	I63338	I63338 Sequence 25	C 503	10.4	57.8	20	6	AR122429	AR122429 Sequence
431	10.8	60.0	30	6	CQ878195	CQ878195 Sequence	C 504	10.4	57.8	20	6	AR136801	AR136801 Sequence
432	10.8	60.0	30	6	I09673	I09673 Sequence 3	C 505	10.4	57.8	20	6	BD142004	BD142004 A method
433	10.6	58.9	17	6	AX687795	AX687795 Sequence	C 506	10.4	57.8	20	6	BD142722	BD142722 Thermosta
434	10.6	58.9	17	6	AX687796	AX687796 Sequence	C 507	10.4	57.8	20	6	BD217329	BD217329 Method of
435	10.6	58.9	19	6	AX297761	AX297761 Sequence	C 508	10.4	57.8	20	6	BD217357	BD217357 Method of
436	10.6	58.9	20	6	BD090204	BD090204 A method	C 509	10.4	57.8	20	6	I31143	I31143 Sequence 55
437	10.6	58.9	20	6	BD176282	BD176282 A method	C 510	10.4	57.8	20	6	AR33069	AR33069 Sequence 5
438	10.6	58.9	20	6	CQ754393	CQ754393 Sequence	C 511	10.4	57.8	20	6	AR300293	AR300293 Sequence
439	10.6	58.9	20	6	CQ754394	CQ754394 Sequence	C 512	10.4	57.8	20	6	AX293556	AX293556 Sequence
440	10.6	58.9	20	6	CQ754956	CQ754956 Sequence	C 513	10.4	57.8	20	6	AX293836	AX293836 Sequence
441	10.6	58.9	20	6	CQ754957	CQ754957 Sequence	C 514	10.4	57.8	20	6	AX294091	AX294091 Sequence
442	10.6	58.9	20	6	AR211778	AR211778 Sequence	C 515	10.4	57.8	20	6	AX294739	AX294739 Sequence
443	10.6	58.9	20	6	AX534731	AX534731 Sequence	C 516	10.4	57.8	20	6	AX295265	AX295265 Sequence
444	10.6	58.9	20	6	AX663690	AX663690 Sequence	C 517	10.4	57.8	21	6	AR060521	AR060521 Sequence
445	10.6	58.9	20	6	BD009905	BD009905 Compositi	C 518	10.4	57.8	21	6	AR262745	AR262745 Sequence
446	10.6	58.9	21	6	AR120056	AR120056 Sequence	C 519	10.4	57.8	21	6	AX154122	AX154122 Sequence
447	10.6	58.9	21	6	I13852	I13852 Sequence 60	C 520	10.4	57.8	21	6	AX554271	AX554271 Sequence
448	10.6	58.9	23	6	CQ979070	CQ979070 Sequence	C 521	10.4	57.8	22	6	AR089967	AR089967 Sequence
449	10.6	58.9	24	6	BD073288	BD073288 Productio	C 522	10.4	57.8	23	6	BD074374	BD074374 Method of
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451	10.6	58.9	24	6	AX443628	AX443628 Sequence	C 524	10.4	57.8	23	6	AR259156	AR259156 Sequence
452	10.6	58.9	24	6	AX447389	AX447389 Sequence	C 525	10.4	57.8	23	6	AR585526	AR585526 Sequence
453	10.6	58.9	24	8	S71210	S71210 PNP=Prion	C 526	10.4	57.8	23	6	AX000313	AX000313 Sequence
454	10.6	58.9	25	6	CQ864915	CQ864915 Sequence	C 527	10.4	57.8	24	6	AX288923	AX288923 Sequence
455	10.6	58.9	25	6	E34113	E34113 Protein par	C 528	10.4	57.8	24	6	AX289203	AX289203 Sequence
456	10.6	58.9	25	6	AX447610	AX447610 Sequence	C 529	10.4	57.8	24	6		



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531	10.4	57.8	24	6	AX290106	AX290106 Sequence	C 604	10.2	56.7	20	6	BD079251	BD079251 Receptors
532	10.4	57.8	24	6	AX290202	AX290202 Sequence	C 605	10.2	56.7	20	6	BD187473	BD187473 A nucleic
533	10.4	57.8	24	6	AX290632	AX290632 Sequence	C 606	10.2	56.7	20	6	BD189603	BD189603 A nucleic
534	10.4	57.8	24	6	AX776277	AX776277 Sequence	C 607	10.2	56.7	20	6	BD190146	BD190146 Pharmaceu
535	10.4	57.8	25	6	BD223554	Gene poly	C 608	10.2	56.7	20	6	CQ985636	CQ985636 Sequence
536	10.4	57.8	25	6	BD245987	BD245987 Developme	C 609	10.2	56.7	20	6	CS104050	CS104050 Sequence
537	10.4	57.8	25	6	E23471	E23471 Alcohol deh	C 610	10.2	56.7	20	6	E15621	E15621 PCR primer
538	10.4	57.8	25	6	109491	109491 Sequence 5	C 611	10.2	56.7	20	6	E29863	E29863 HIV cofacto
539	10.4	57.8	25	6	AR540735	AR540735 Sequence	C 612	10.2	56.7	20	6	E58798	E58798 Method for
540	10.4	57.8	25	6	AX609478	AX609478 Sequence	C 613	10.2	56.7	20	6	E60045	E60045 Gene encodi
541	10.4	57.8	25	6	AX611040	AX611040 Sequence	C 614	10.2	56.7	20	6	AR181718	AR181718 Sequence
542	10.4	57.8	25	6	AX611041	AX611041 Sequence	C 615	10.2	56.7	20	6	AR236869	AR236869 Sequence
543	10.4	57.8	25	6	BD017495	BD017495 Mutant 11	C 616	10.2	56.7	20	6	AR265764	AR265764 Sequence
544	10.4	57.8	27	6	AX840300	AX840300 Sequence	C 617	10.2	56.7	20	6	AR336836	AR336836 Sequence
545	10.4	57.8	28	6	BD096358	BD096358 Medical c	C 618	10.2	56.7	20	6	AR343396	AR343396 Sequence
546	10.4	57.8	28	6	AX023310	AX023310 Sequence	C 619	10.2	56.7	20	6	AR362095	AR362095 Sequence
547	10.4	57.8	28	6	AX283110	AX283110 Sequence	C 620	10.2	56.7	20	6	AR362102	AR362102 Sequence
548	10.4	57.8	29	6	BD057732	BD057732 Fusion pr	C 621	10.2	56.7	20	6	AR373471	AR373471 Sequence
549	10.4	57.8	29	6	BD081562	BD081562 Soluble s	C 622	10.2	56.7	20	6	AR381285	AR381285 Sequence
550	10.4	57.8	29	6	BD170745	BD170745 Human RGF	C 623	10.2	56.7	20	6	AR442560	AR442560 Sequence
551	10.4	57.8	29	6	AR213673	AR213673 Sequence	C 624	10.2	56.7	20	6	AR629708	AR629708 Sequence
552	10.4	57.8	30	6	E62955	E62955 Novel polyp	C 625	10.2	56.7	20	6	AX104794	AX104794 Sequence
553	10.4	57.8	30	6	AX365551	AX365551 Sequence	C 626	10.2	56.7	20	6	AX105256	AX105256 Sequence
554	10.2	56.7	15	6	AR131777	AR131777 Sequence	C 627	10.2	56.7	20	6	AX294985	AX294985 Sequence
555	10.2	56.7	15	6	BD266427	BD266427 Univerbal	C 628	10.2	56.7	20	6	AX296271	AX296271 Sequence
556	10.2	56.7	17	6	AR161494	AR161494 Sequence	C 629	10.2	56.7	20	6	AX482600	AX482600 Sequence
557	10.2	56.7	17	6	BD132027	BD132027 Human B10	C 630	10.2	56.7	20	6	AX546832	AX546832 Sequence
558	10.2	56.7	17	6	BD199049	BD199049 Method an	C 631	10.2	56.7	20	6	AX547847	AX547847 Sequence
559	10.2	56.7	17	6	AX226999	AX226999 Sequence	C 632	10.2	56.7	20	6	AX616876	AX616876 Sequence
560	10.2	56.7	17	6	AX227000	AX227000 Sequence	C 633	10.2	56.7	20	6	AX708882	AX708882 Sequence
561	10.2	56.7	17	6	AX227001	AX227001 Sequence	C 634	10.2	56.7	21	6	AR110352	AR110352 Sequence
562	10.2	56.7	17	6	AX262832	AX262832 Sequence	C 635	10.2	56.7	21	6	AR112225	AR112225 Sequence
563	10.2	56.7	17	6	AX262833	AX262833 Sequence	C 636	10.2	56.7	21	6	AR112227	AR112227 Sequence
564	10.2	56.7	17	6	AX475347	AX475347 Sequence	C 637	10.2	56.7	21	6	AR149267	AR149267 Sequence
565	10.2	56.7	17	6	AX475348	AX475348 Sequence	C 638	10.2	56.7	21	6	AR149269	AR149269 Sequence
566	10.2	56.7	17	6	AX475349	AX475349 Sequence	C 639	10.2	56.7	21	6	CS104000	CS104000 Sequence
567	10.2	56.7	17	6	AX756830	AX756830 Sequence	C 640	10.2	56.7	21	6	I38802	I38802 Sequence 40
568	10.2	56.7	17	6	AX759001	AX759001 Sequence	C 641	10.2	56.7	21	6	AX111623	AX111623 Sequence
569	10.2	56.7	18	6	A09972	A09972 Probe zeta.	C 642	10.2	56.7	21	6	BD009372	BD009372 Chimeric,
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571	10.2	56.7	18	6	AR065914	AR065914 Sequence	C 644	10.2	56.7	23	6	AR117386	AR117386 Sequence
572	10.2	56.7	18	6	AR087346	AR087346 Sequence	C 645	10.2	56.7	23	6	AR125082	AR125082 Sequence
573	10.2	56.7	18	6	AR134533	AR134533 Sequence	C 646	10.2	56.7	23	6	AR205165	AR205165 Sequence
574	10.2	56.7	18	6	AR138401	AR138401 Sequence	C 647	10.2	56.7	23	6	AR223369	AR223369 Sequence
575	10.2	56.7	18	6	BD222561	BD222561 ETS facto	C 648	10.2	56.7	23	6	AR287870	AR287870 Sequence
576	10.2	56.7	18	6	CQ803284	CQ803284 Sequence	C 649	10.2	56.7	23	6	AX298315	AX298315 Sequence
577	10.2	56.7	18	6	CQ806744	CQ806744 Sequence	C 650	10.2	56.7	23	6	AX710156	AX710156 Sequence
578	10.2	56.7	18	6	CQ890652	CQ890652 Sequence	C 651	10.2	56.7	24	6	AR162016	AR162016 Sequence
579	10.2	56.7	18	6	CS124377	CS124377 Sequence	C 652	10.2	56.7	24	6	CS063962	CS063962 Sequence
580	10.2	56.7	18	6	I73492	I73492 Sequence 5	C 653	10.2	56.7	24	6	AR204620	AR204620 Sequence
581	10.2	56.7	18	6	AR234548	AR234548 Sequence	C 654	10.2	56.7	24	6	AX290352	AX290352 Sequence
582	10.2	56.7	18	6	AR256805	AR256805 Sequence	C 655	10.2	56.7	24	6	AX291340	AX291340 Sequence
583	10.2	56.7	18	6	AR264364	AR264364 Sequence	C 656	10.2	56.7	24	6	AX291638	AX291638 Sequence
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586	10.2	56.7	18	6	AR442163	AR442163 Sequence	C 659	10.2	56.7	24	6	AX803694	AX803694 Sequence
587	10.2	56.7	18	6	AR580332	AR580332 Sequence	C 660	10.2	56.7	25	6	BD177080	BD177080 Standard
588	10.2	56.7	18	6	AR647353	AR647353 Sequence	C 661	10.2	56.7	25	6	BD236848	BD236848 Method fo
589	10.2	56.7	18	6	AX010843	AX010843 Sequence	C 662	10.2	56.7	25	6	CQ862117	CQ862117 Sequence
590	10.2	56.7	18	6	AX026061	AX026061 Sequence	C 663	10.2	56.7	25	6	CQ866546	CQ866546 Sequence
591	10.2	56.7	18	6	AX076198	AX076198 Sequence	C 664	10.2	56.7	25	6	E44153	E44153 Novel G pro
592	10.2	56.7	18	6	AX105843	AX105843 Sequence	C 665	10.2	56.7	25	6	AR207617	AR207617 Sequence
593	10.2	56.7	18	6	AX643994	AX643994 Sequence	C 666	10.2	56.7	25	6	AX189374	AX189374 Sequence
594	10.2	56.7	18	6	AX753071	AX753071 Sequence	C 667	10.2	56.7	25	6	AX316607	AX316607 Sequence
595	10.2	56.7	18	6	AX769947	AX769947 Sequence	C 668	10.2	56.7	25	6	AX476324	AX476324 Sequence
596	10.2	56.7	19	6	A66881	A66881 Sequence 48	C 669	10.2	56.7	25	6	AX476325	AX476325 Sequence
597	10.2	56.7	19	6	AR488383	AR488383 Sequence	C 670	10.2	56.7	25	6	AX476326	AX476326 Sequence
598	10.2	56.7	19	6	AX317703	AX317703 Sequence	C 671	10.2	56.7	25	6	AX476327	AX476327 Sequence
599	10.2	56.7	20	6	AR099517	AR099517 Sequence	C 672	10.2	56.7	25	6	AX476328	AX476328 Sequence
600	10.2	56.7	20	6	AR122514	AR122514 Sequence	C 673	10.2	56.7	25	6	AX476329	AX476329 Sequence
601	10.2	56.7	20	6	AR178798	AR178798 Sequence	C 674	10.2	56.7	25	6	AX476330	AX476330 Sequence
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676	10.2	56.7	25	6	AX476332	AX476332 Sequence	749	10	55.6	20	6	AX799185	AX799185 Sequence
677	10.2	56.7	25	6	AX476333	AX476333 Sequence	750	10	55.6	21	6	A05140	A05140 Oligonucleo
678	10.2	56.7	25	6	AX476334	AX476334 Sequence	751	10	55.6	21	6	C0984198	C0984198 Sequence
679	10.2	56.7	25	6	AX573448	AX573448 Sequence	752	10	55.6	21	6	C0984199	C0984199 Sequence
680	10.2	56.7	26	6	AR090952	AR090952 Sequence	753	10	55.6	21	6	C0984200	C0984200 Sequence
681	10.2	56.7	26	6	BD142701	BD142701 Polypepti	754	10	55.6	21	6	CQ984201	CQ984201 Sequence
682	10.2	56.7	26	6	BD142702	BD142702 Polypepti	755	10	55.6	21	6	CQ984203	CQ984203 Sequence
683	10.2	56.7	26	6	BD178194	BD178194 Novel DNA	756	10	55.6	21	6	CQ984627	CQ984627 Sequence
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685	10.2	56.7	26	6	AR260141	AR260141 Sequence	758	10	55.6	21	6	CQ984629	CQ984629 Sequence
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687	10.2	56.7	26	6	AR409831	AR409831 Sequence	760	10	55.6	21	6	AR202641	AR202641 Sequence
688	10.2	56.7	26	6	AX460357	AX460357 Sequence	761	10	55.6	22	6	A80536	A80536 Sequence 24
689	10.2	56.7	26	6	AX460358	AX460358 Sequence	762	10	55.6	22	6	A97959	A97959 Sequence 23
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691	10.2	56.7	27	6	AR039898	AR039898 Sequence	764	10	55.6	22	6	AR254952	AR254952 Sequence
692	10.2	56.7	27	6	AR040288	AR040288 Sequence	765	10	55.6	22	6	AX428837	AX428837 Sequence
693	10.2	56.7	27	6	BD174262	BD174262 Novel phi	766	10	55.6	22	6	AX473183	AX473183 Sequence
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696	10.2	56.7	27	6	AR187689	AR187689 Sequence	769	10	55.6	23	6	CS097090	CS097090 Sequence
697	10.2	56.7	27	6	AR191548	AR191548 Sequence	770	10	55.6	23	6	AR481851	AR481851 Sequence
698	10.2	56.7	27	6	AR280338	AR280338 Sequence	771	10	55.6	23	6	AX459718	AX459718 Sequence
699	10.2	56.7	27	6	AX035610	AX035610 Sequence	772	10	55.6	24	6	A30825	A30825 Oligonucleo
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701	10.2	56.7	28	6	AR183100	AR183100 Sequence	774	10	55.6	24	6	AR025313	AR025313 Sequence
702	10.2	56.7	29	6	AR109223	AR109223 Sequence	775	10	55.6	24	6	AR044635	AR044635 Sequence
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709	10.2	56.7	29	6	AR560202	AR560202 Sequence	782	10	55.6	24	6	186324	186324 Sequence 59
710	10.2	56.7	29	6	AX105075	AX105075 Sequence	783	10	55.6	24	6	AR360709	AR360709 Sequence
711	10.2	56.7	29	6	AX298100	AX298100 Sequence	784	10	55.6	24	6	AR449247	AR449247 Sequence
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713	10.2	56.7	30	6	BD143277	BD143277 Oligonuc	786	10	55.6	24	6	AR607300	AR607300 Sequence
714	10.2	56.7	30	6	AR636157	AR636157 Sequence	787	10	55.6	24	6	AR628875	AR628875 Sequence
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716	10	55.6	11	6	BD124485	BD124485 Compositi	789	10	55.6	24	6	AX060766	AX060766 Sequence
717	10	55.6	11	6	AR301735	AR301735 Sequence	790	10	55.6	24	6	AX060945	AX060945 Sequence
718	10	55.6	11	6	AX625221	AX625221 Sequence	791	10	55.6	24	6	AX288990	AX288990 Sequence
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720	10	55.6	13	6	AR024073	AR024073 Sequence	793	10	55.6	24	6	AX290433	AX290433 Sequence
721	10	55.6	13	6	AR224292	AR224292 Sequence	794	10	55.6	24	6	AX291099	AX291099 Sequence
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724	10	55.6	13	6	BD001606	BD001606 Method an	797	10	55.6	25	6	AX092805	AX092805 Sequence
725	10	55.6	16	6	CS124101	CS124101 Sequence	798	10	55.6	25	6	AX448163	AX448163 Sequence
726	10	55.6	17	6	AX735417	AX735417 Sequence	799	10	55.6	25	6	AX449534	AX449534 Sequence
727	10	55.6	17	6	AX928276	AX928276 Sequence	800	10	55.6	25	6	AX501210	AX501210 Sequence
728	10	55.6	17	11	CS000985	CS000985 Sequence	801	10	55.6	25	6	AX501211	AX501211 Sequence
729	10	55.6	18	6	CQ897433	CQ897433 Sequence	802	10	55.6	25	6	AX501212	AX501212 Sequence
730	10	55.6	18	6	CQ897870	CQ897870 Sequence	803	10	55.6	25	6	AX501213	AX501213 Sequence
731	10	55.6	18	6	CS124147	CS124147 Sequence	804	10	55.6	25	6	AX501214	AX501214 Sequence
732	10	55.6	18	6	AR670058	AR670058 Sequence	805	10	55.6	25	6	AX501215	AX501215 Sequence
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734	10	55.6	19	6	E36867	E36867 Human telom	807	10	55.6	25	6	AX501217	AX501217 Sequence
735	10	55.6	19	6	AR243388	AR243388 Sequence	808	10	55.6	25	6	AX533753	AX533753 Sequence
736	10	55.6	19	6	AR390544	AR390544 Sequence	809	10	55.6	25	6	AX533754	AX533754 Sequence
737	10	55.6	19	6	AR393158	AR393158 Sequence	810	10	55.6	25	6	AX533755	AX533755 Sequence
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745	10	55.6	20	6	AX295066	AX295066 Sequence	818	10	55.6	26	6	CQ795899	CQ795899 Sequence
746	10	55.6	20	6	AX295732	AX295732 Sequence	819	10	55.6	26	6	AR322409	AR322409 Sequence
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C 824	10	55.6	26	6	AX555622	AX555622 Sequence	C 897	9.8	54.4	17	6	AR465992	AR465992 Sequence
C 825	10	55.6	26	6	AX555721	AX555721 Sequence	C 898	9.8	54.4	17	6	AR494789	AR494789 Sequence
C 826	10	55.6	26	6	AX598528	AX598528 Sequence	C 899	9.8	54.4	17	6	AR561053	AR561053 Sequence
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C 828	10	55.6	27	6	AR143771	AR143771 Sequence	C 901	9.8	54.4	17	6	AR610752	AR610752 Sequence
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C 831	10	55.6	27	6	AR752785	AR752785 Sequence	C 904	9.8	54.4	17	6	AX423026	AX423026 Sequence
C 832	10	55.6	28	6	AR090182	AR090182 Sequence	C 905	9.8	54.4	17	6	AX475345	AX475345 Sequence
C 833	10	55.6	28	6	AR156794	AR156794 Sequence	C 906	9.8	54.4	17	6	AX475346	AX475346 Sequence
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C 835	10	55.6	28	6	AR197217	AR197217 Sequence	C 908	9.8	54.4	17	6	AX692063	AX692063 Sequence
C 836	10	55.6	28	6	AR259371	AR259371 Sequence	C 909	9.8	54.4	17	6	AX692064	AX692064 Sequence
C 837	10	55.6	28	6	AR366612	AR366612 Sequence	C 910	9.8	54.4	17	6	AX692065	AX692065 Sequence
C 838	10	55.6	28	6	AR474831	AR474831 Sequence	C 911	9.8	54.4	17	6	AX692066	AX692066 Sequence
C 839	10	55.6	28	6	AR565501	AR565501 Sequence	C 912	9.8	54.4	17	6	AX725580	AX725580 Sequence
C 840	10	55.6	28	6	AR565504	AR565504 Sequence	C 913	9.8	54.4	17	6	AX729068	AX729068 Sequence
C 841	10	55.6	28	6	AX188477	AX188477 Sequence	C 914	9.8	54.4	17	6	AX730624	AX730624 Sequence
C 842	10	55.6	28	6	AX188480	AX188480 Sequence	C 915	9.8	54.4	17	6	AX732375	AX732375 Sequence
C 843	10	55.6	28	6	AX555604	AX555604 Sequence	C 916	9.8	54.4	17	6	AX757766	AX757766 Sequence
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C 846	10	55.6	29	6	BD227336	BD227336 Secretd	C 919	9.8	54.4	18	6	AR147472	AR147472 Sequence
C 847	10	55.6	30	6	A18851	A18851 oligonucleo	C 920	9.8	54.4	18	6	AR147476	AR147476 Sequence
C 848	10	55.6	30	6	A49728	A49728 Sequence 3	C 921	9.8	54.4	18	6	CQ0806712	CQ0806712 Sequence
C 849	10	55.6	30	6	A50153	A50153 Sequence 10	C 922	9.8	54.4	18	6	AR293497	AR293497 Sequence
C 850	10	55.6	30	6	A51617	A51617 Sequence 27	C 923	9.8	54.4	18	6	AR610734	AR610734 Sequence
C 851	10	55.6	30	6	AR062138	AR062138 Sequence	C 924	9.8	54.4	18	6	AR610743	AR610743 Sequence
C 852	10	55.6	30	6	AR092905	AR092905 Sequence	C 925	9.8	54.4	18	6	AR610821	AR610821 Sequence
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C 854	10	55.6	30	6	BD189689	BD189689 A method	C 927	9.8	54.4	18	6	AX686024	AX686024 Sequence
C 855	10	55.6	30	6	BD217482	BD217482 Polypeptid	C 928	9.8	54.4	18	6	AX937841	AX937841 Sequence
C 856	10	55.6	30	6	CS080397	CS080397 Sequence	C 929	9.8	54.4	18	6	AX937858	AX937858 Sequence
C 857	10	55.6	30	6	CS116875	CS116875 Sequence	C 930	9.8	54.4	19	6	AR024470	AR024470 Sequence
C 858	10	55.6	30	6	CS116876	CS116876 Sequence	C 931	9.8	54.4	19	6	CQ960538	CQ960538 Sequence
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C 867	10	55.6	30	6	AX548435	AX548435 Sequence	C 940	9.8	54.4	19	6	AR210197	AR210197 Sequence
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C 878	9.8	54.4	15	6	CS057456	CS057456 Sequence	C 951	9.8	54.4	20	6	A51364	A51364 Sequence 6
C 879	9.8	54.4	15	6	CS057475	CS057475 Sequence	C 952	9.8	54.4	20	6	A78835	A78835 Sequence 13
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C 881	9.8	54.4	15	6	AR610767	AR610767 Sequence	C 954	9.8	54.4	20	6	AR038047	AR038047 Sequence
C 882	9.8	54.4	15	6	AR610824	AR610824 Sequence	C 955	9.8	54.4	20	6	AR169764	AR169764 Sequence
C 883	9.8	54.4	16	6	AR610753	AR610753 Sequence	C 956	9.8	54.4	20	6	BD131967	BD131967 oligonucleo
C 884	9.8	54.4	16	6	AR610760	AR610760 Sequence	C 957	9.8	54.4	20	6	BD196028	BD196028 Antisense
C 885	9.8	54.4	16	6	AR610823	AR610823 Sequence	C 958	9.8	54.4	20	6	BD206410	BD206410 Canine et
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C 887	9.8	54.4	17	6	CQ624926	CQ624926 Sequence	C 960	9.8	54.4	20	6	CS013383	CS013383 Sequence
C 888	9.8	54.4	17	6	CQ624927	CQ624927 Sequence	C 961	9.8	54.4	20	6	CS106476	CS106476 Sequence
C 889	9.8	54.4	17	6	CQ624928	CQ624928 Sequence	C 962	9.8	54.4	20	6	CS132454	CS132454 Sequence
C 890	9.8	54.4	17	6	CQ624929	CQ624929 Sequence	C 963	9.8	54.4	20	6	CS132468	CS132468 Sequence
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C 892	9.8	54.4	17	6	I46306	I46306 Sequence 7	C 965	9.8	54.4	20	6	I49945	I49945 Sequence 7
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C 894	9.8	54.4	17	6	AR465989	AR465989 Sequence	C 967	9.8	54.4	20	6	AR337694	AR337694 Sequence

RESULT 1  
AR052619  
LOCUS AR052619 18 bp DNA  
DEFINITION Sequence 17 from patent US 5831066.  
ACCESSION AR052619  
VERSION AR052619.1 GI:5975983  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Reed,J.C.  
TITLE Regulation of bcl-2 gene expression  
JOURNAL Patent: US 5831066-A 17 03-NOV-1998;  
FEATURES  
source  
1.18  
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C 970	9.8	54.4	20	6	AR610711	Sequence
C 971	9.8	54.4	20	6	AR610722	Sequence
C 972	9.8	54.4	20	6	AR610819	Sequence
973	9.8	54.4	20	6	AR647706	Sequence
974	9.8	54.4	20	6	AX294897	Sequence
975	9.8	54.4	20	6	AX296260	Sequence
976	9.8	54.4	20	6	AX297115	Sequence
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978	9.8	54.4	20	6	AX810926	Sequence
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C 980	9.8	54.4	21	6	A11936	Mutagen Prt
C 981	9.8	54.4	21	6	BD144170	Oligonuc1
C 982	9.8	54.4	21	6	CQ785579	Sequence
C 983	9.8	54.4	21	6	CS081612	Sequence
C 984	9.8	54.4	21	6	AR560648	Sequence
C 985	9.8	54.4	21	6	AR610698	Sequence
C 986	9.8	54.4	21	6	AR610710	Sequence
C 987	9.8	54.4	21	6	AR610818	Sequence
988	9.8	54.4	21	6	AX250335	Sequence
989	9.8	54.4	21	6	AX404281	Sequence
C 990	9.8	54.4	21	6	AX404282	Sequence
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C 992	9.8	54.4	21	6	AX404314	Sequence
C 993	9.8	54.4	21	6	AX429325	Sequence
C 994	9.8	54.4	21	6	AX556585	Sequence
C 995	9.8	54.4	21	6	AX706623	Sequence
C 996	9.8	54.4	21	6	AX707553	Sequence
997	9.8	54.4	21	6	AX937323	Sequence
C 998	9.8	54.4	21	9	MMN6X104	Musculus
999	9.8	54.4	22	6	A38107	Sequence
1000	9.8	54.4	22	6	AR040736	Sequence

RESULT 2  
AR052624  
LOCUS AR052624 18 bp DNA  
DEFINITION Sequence 24 from patent US 5831066.  
ACCESSION AR052624  
VERSION AR052624.1 GI:5975988

Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 4  
AR140496  
LOCUS AR140496 18 bp DNA  
DEFINITION Sequence 55 from patent US 6207646.  
ACCESSION AR140496  
VERSION AR140496.1 GI:14482992  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Krieg,A.M., Kline,J., Kliman,D. and Steinberg,A.D.  
TITLE Immunostimulatory nucleic acid molecules  
JOURNAL Patent: US 6207646-A 55 27-MAR-2001;  
FEATURES  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 3  
AR116926  
LOCUS AR116926 18 bp DNA  
DEFINITION Sequence 1 from patent US 6140051.  
ACCESSION AR116926  
VERSION AR116926.1 GI:114097832  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Brown,I.R. and Xu,C.  
TITLE Fluorescent dibenzazole derivatives and methods related thereto  
JOURNAL Patent: US 6140051-A 1 31-OCT-2000;  
FEATURES  
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1.18  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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RESULT 1  
AR052619  
LOCUS AR052619 18 bp DNA  
DEFINITION Sequence 17 from patent US 5831066.  
ACCESSION AR052619  
VERSION AR052619.1 GI:5975983  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Reed,J.C.  
TITLE Regulation of bcl-2 gene expression  
JOURNAL Patent: US 5831066-A 17 03-NOV-1998;  
FEATURES  
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ORIGIN  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 2  
AR052624  
LOCUS AR052624 18 bp DNA  
DEFINITION Sequence 24 from patent US 5831066.  
ACCESSION AR052624  
VERSION AR052624.1 GI:5975988

Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 5  
AR146347  
LOCUS AR146347 18 bp DNA linear PAT 08-AUG-2001  
DEFINITION Sequence 59 from patent US 6218371.  
ACCESSION AR146347  
VERSION AR146347.1 GI:15109536  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Krieg,A.M. and Weiner,G.  
TITLE Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines  
JOURNAL Patent: US 6218371-A 59 17-APR-2001;  
FEATURES  
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ORIGIN  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 6  
AR146392  
LOCUS AR146392 18 bp DNA linear PAT 08-AUG-2001  
DEFINITION Sequence 104 from patent US 6218371.  
ACCESSION AR146392  
VERSION AR146392.1 GI:15109581  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Krieg,A.M. and Weiner,G.  
TITLE Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines  
JOURNAL Patent: US 6218371-A 104 17-APR-2001;  
FEATURES  
source 1. .18  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 7  
AR154716  
LOCUS AR154716 18 bp DNA linear PAT 08-AUG-2001  
DEFINITION Sequence 45 from patent US 6239116.  
ACCESSION AR154716

VERSION AR154716.1 GI:15122769  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Krieg,A.M. and Kline,J.N.  
TITLE Immunostimulatory nucleic acid molecules  
JOURNAL Patent: US 6239116-A 45 29-MAY-2001;  
FEATURES  
source 1. .18  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 8  
AR167448  
LOCUS AR167448 18 bp DNA linear PAT 17-DEC-2001  
DEFINITION Sequence 14 from patent US 6287591.  
ACCESSION AR167448  
VERSION AR167448.1 GI:17903228  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Semple,S.C., Klimuk,S.K., Haraeym,T., Hope,M.J., Ansell,S.M., Cullis,P., Scherrer,P. and Debeyer,D.  
TITLE Charged therapeutic agents encapsulated in lipid particles containing four lipid components  
JOURNAL Patent: US 6287591-A 14 11-SEP-2001;  
FEATURES  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 9  
BD069938  
LOCUS BD069938 18 bp DNA linear PAT 27-AUG-2002  
DEFINITION Use of nucleic acids containing unmethylated CpG dinucleotide in the treatment of LPS-associated disorders.  
ACCESSION BD069938  
VERSION BD069938.1 GI:22615541  
KEYWORDS JP 2001513776-A/27.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Schwartz,D.A. and Krieg,A.M.  
TITLE Use of nucleic acids containing unmethylated CpG dinucleotide in the treatment of LPS-associated disorders  
JOURNAL Patent: JP 2001513776-A 27 04-SEP-2001;  
COMMENT UNIVERSITY OF IOWA RESEARCH FOUNDATION  
OS Artificial Sequence

PN JP 2001513776-A/27  
PD 04-SEP-2001  
PF 25-FEB-1998 JP 1998537810  
PR 26-FEB-1997 US 60/039405  
PI DAVID A SCHWARTZ, ARTHUR M KRING  
PC A61K49/00, C07H21/02, C07H21/04, A01N43/04  
CC synthetic oligonucleotide  
FH Key Location/Qualifiers  
FT source 1.18  
/organism='Artificial Sequence'.  
Location/Qualifiers  
1.18  
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/mol\_type='genomic DNA'  
/db\_xref='taxon:32630'

ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 10  
BD076451 18 bp DNA linear PAT 27-AUG-2002  
LOCUS Combined antisense library.  
DEFINITION BD076451  
ACCESSION BD076451.1 GI:22622054  
VERSION JP 2001519170-A/45.  
KEYWORDS JP 2001519170-A/45.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
1 (bases 1 to 18)  
REFERENCE Riley, T.A., Brown, B.D. and Arnold, L.J.  
AUTHORS Combined antisense library  
TITLE Patent: JP 2001519170-A 45 23-OCT-2001;  
JOURNAL OASIS BIOSCIENCES INC  
COMMENT OS Artificial Sequence  
PN JP 2001519170-A/45  
PD 23-OCT-2001  
PR 28-SEP-1998 JP 2000515030  
RR 02-OCT-1997 US 60/066673, 18-AUG-1998 US 09/136080 PI  
TIMOTHY A RILEY, BOB D BROWN, LYLE J ARNOLD  
PC C12Q1/68, C07H21/04, C12N15/09, C12P19/34, C12N15/00 CC  
synthetic oligonucleotide  
FH Key Location/Qualifiers  
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Location/Qualifiers  
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/mol\_type='genomic DNA'  
/db\_xref='taxon:32630'

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source Location/Qualifiers  
1.18  
/organism='synthetic construct'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32630'

ORIGIN  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 11  
BD080525 18 bp RNA linear PAT 27-AUG-2002  
LOCUS Ribonucleoside-derivative and method for preparing the same.  
DEFINITION BD080525  
ACCESSION BD080525

VERSION BD080525.1 GI:22626128  
KEYWORDS JP 2001515087-A/4.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
1 (bases 1 to 18)  
REFERENCE Pitsch, S., Weiss, P.A. and Jenny, L.  
AUTHORS Ribonucleoside-derivative and method for preparing the same  
TITLE Patent: JP 2001515087-A 4 18-SEP-2001;  
JOURNAL STEFAN PITSCCH, PATRICK A WEISS, LUZI JENNY  
OS Artificial Sequence  
PN JP 2001515087-A/4  
PD 18-SEP-2001  
PF 17-AUG-1998 JP 2000509723  
PR 18-AUG-1997 CH 1931/97  
PI STEFAN PITSCCH, PATRICK A WEISS, LUZI JENNY  
PC C07H19/06, C07F7/18, C07H19/16, C07H21/02, C07H23/00 CC  
Description of Artificial Sequence: synthetic polynucleotide FH  
Key Location/Qualifiers  
FT source 1.18  
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Location/Qualifiers  
1.18  
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/mol\_type='genomic RNA'  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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18 TCTCCAGCGTGGCCAT 1

Db 18 TCTCCAGCGTGGCCAT 1

RESULT 12  
BD106497 18 bp DNA linear PAT 18-SEP-2002  
LOCUS High efficiency encapsulation of charged therapeutic agents in lipid vesicles.  
DEFINITION BD106497  
ACCESSION BD106497.1 GI:23201315  
VERSION JP 2002501511-A/14.  
KEYWORDS Chlamydia sp.  
SOURCE Chlamydia sp.  
ORGANISM Chlamydia sp.  
Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia.  
1 (bases 1 to 18)  
REFERENCE Semple, S.C., Klimuk, S.K., Harasym, T., Hope, M.J., Ansel, S.M.,  
AUTHORS Cullis, P., Scherrer, P. and Debeyer, D.S.  
TITLE High efficiency encapsulation of charged therapeutic agents in lipid vesicles  
JOURNAL Patent: JP 2002501511-A 14 15-JAN-2002;  
INEX PHARMACEUTICALS CORP  
PN JP 2002501511-A/14  
PD 15-JAN-2002  
PR 14-MAY-1998 JP 1998548646  
PI SEAN C SEMPLE, SANDRA K KLIMUK, TROY HARASYM, MICHAEL J HOPE, PI  
PIETER CULLIS, PETER SCHERRER, DAN SUITE DEBEYER PC A61K9/00  
CC Strandedness: Single;  
CC Topology: Linear;  
FH Key Location/Qualifiers  
FT source 1.18  
/organism='Chlamydia sp.'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:35827'

FEATURES  
source Location/Qualifiers  
1.18  
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/mol\_type='genomic DNA'  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 13  
BD187532

LOCUS BD187532 18 bp DNA linear PAT 17-JUL-2003

DEFINITION REGULATION OF bcl-2 GENE EXPRESSION.

ACCESSION BD187532

VERSION BD187532.1 GI:32997271

KEYWORDS JP 2003026609-A/17.

SOURCE JP 2003026609-A/17.

ORGANISM JP 2003026609-A/17.

REFERENCE 1 (bases 1 to 18)

AUTHORS Reed,J.C.

TITLE REGULATION OF bcl-2 GENE EXPRESSION

JOURNAL Patent: JP 2003026609-A 17 29-JAN-2003;

COMMENT John C REED

OS Artificial Sequence

PN JP 2003026609-A/17

PD 29-JUN-2003

PR 19-JUN-2002 JP 2002178753

PR 20-SEP-1993 US 08/124256

PI John C reed

CC Description of Artificial Sequence: Designed DNA based on bcl-2 gene

FEATURES

source Location/Qualifiers

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/organism="synthetic construct"

/mol\_type="genomic DNA"

/db\_xref="taxon:32630"

ORIGIN

Query Match 100.0%; Score 18; DB 6; Length 18;

Best Local Similarity 100.0%; Pred. No. 3.2e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 14  
BD190420

LOCUS BD190420 18 bp DNA linear PAT 17-JUL-2003

DEFINITION Microemulsions with Adsorbed Macromolecules and Microparticles.

ACCESSION BD190420

VERSION BD190420.1 GI:33000159

KEYWORDS JP 2002537102-A/4.

SOURCE JP 2002537102-A/4.

ORGANISM JP 2002537102-A/4.

REFERENCE 1 (bases 1 to 18)

AUTHORS Barackman,J., Simph,M., Ugozoli,M., Kazazu,J., Donnelly,J.,

TITLE Microemulsions with Adsorbed Macromolecules and Microparticles

JOURNAL Patent: JP 2002537102-A 4 05-NOV-2002;

COMMENT Chiron Corporation

OS Artificial Sequence

PN JP 2002537102-A/4

PD 05-NOV-2002

PR 09-FEB-2000 JP 2006000618

PR 29-JUL-1999 US 60/146391,28-OCT-1999 US 60/161997, PR

26-FEB-1999 US 60/121858

PI John Barackman,manmohan simph,mildred ugozoli,jina kazazu,john

PI donnelly,

PI gary s ott,derek ohagan

CC Oligonucleotide

FEATURES FH Key Location/Qualifiers

source 1..18

/organism="synthetic construct"

/mol\_type="genomic DNA"

/db\_xref="taxon:32630"

ORIGIN

Query Match 100.0%; Score 18; DB 6; Length 18;

Best Local Similarity 100.0%; Pred. No. 3.2e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 15  
BD192469

LOCUS BD192469 18 bp DNA linear PAT 17-JUL-2003

DEFINITION Compositions and methods for the delivery of oligonucleotides via the alimentary canal.

ACCESSION BD192469

VERSION BD192469.1 GI:33002208

KEYWORDS JP 2002510319-A/34.

SOURCE JP 2002510319-A/34.

ORGANISM JP 2002510319-A/34.

REFERENCE 1 (bases 1 to 18)

AUTHORS Teng,C.L. and Hardee,G.

TITLE Compositions and methods for the delivery of oligonucleotides via the alimentary canal

JOURNAL Patent: JP 2002510319-A 34 02-APR-2002;

COMMENT ISIS PHARMACEUTICALS INC

OS Artificial Sequence

PN JP 2002510319-A/34

PD 02-APR-2002

PR 01-JUL-1998 JP 1999507295

PR 01-JUL-1997 US 08/886829

PI CHING LEOU TENG,GRBG HARDEE

PI C12Q1/68,A61K9/127,A61K48/00,C07H21/04

CC Description of Artificial Sequence: Novel Sequence FH Key

FEATURES

source Location/Qualifiers

1..18

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/db\_xref="taxon:32630"

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Best Local Similarity 100.0%; Pred. No. 3.2e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 16  
BD205569

LOCUS BD205569 18 bp DNA linear PAT 17-JUL-2003

DEFINITION Method of controlling hematopoiesis by using CpG oligonucleotide.

ACCESSION BD205569

VERSION BD205569.1 GI:33015339

KEYWORDS JP 2002514397-A/59.

SOURCE JP 2002514397-A/59.

ORGANISM JP 2002514397-A/59.

REFERENCE 1 (bases 1 to 18)

AUTHORS Wagner,H. and Lipford,G.

TITLE Method of controlling hematopoiesis by using CpG oligonucleotide

JOURNAL Patent: JP 2002514397-A 59 21-MAY-2002;  
CORY PHARMACEUTICALS GMBH,CORY PHARMACEUTICALS GROUP INC  
COMMENT OS Artificial Sequence  
PN JP 2002514397-A/59  
PD 21-MAY-2002  
PF 14-MAY-1999 JP 2000547969  
PR 14-MAY-1998 US 60/085516,02-FEB-1999 US 09/241653 PI  
PC C12N15/09,A61K31/70,A61K39/39,C07H21/04//A61K45/00,C12N15/00  
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FH Key Location/Qualifiers  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02; Indels 0; Gaps 0;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 17 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD205614  
DEFINITION Method of controlling hematopoiesis by using Cpg oligonucleotide.  
ACCESSION BD205614.1 GI:33015384  
VERSION JP 2002514397-A/104.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Wagner,H. and Lipford,G.  
TITLE Method of controlling hematopoiesis by using Cpg oligonucleotide  
JOURNAL Patent: JP 2002514397-A 104 21-MAY-2002;  
CORY PHARMACEUTICALS GMBH,CORY PHARMACEUTICALS GROUP INC  
COMMENT OS Artificial Sequence  
PN JP 2002514397-A/104  
PD 21-MAY-2002  
PF 14-MAY-1999 JP 2000547969  
PR 14-MAY-1998 US 60/085516,02-FEB-1999 US 09/241653 PI  
PC C12N15/09,A61K31/70,A61K39/39,C07H21/04//A61K45/00,C12N15/00  
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Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 18 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD222609  
DEFINITION Compositions of CPG and saponin adjuvants and uses thereof.  
ACCESSION BD222609  
VERSION BD222609.1 GI:33032379  
KEYWORDS Quillaia saponaria  
SOURCE Quillaia saponaria  
ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids I; Fabales; Quillajaaceae; Quillaia.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Kensil,C.A.  
TITLE Compositions of CPG and saponin adjuvants and uses thereof  
JOURNAL Patent: JP 2002522510-A 1 23-JUL-2002;  
AQUILA BIOPHARMACEUTICALS INC  
COMMENT OS Quillaia saponaria  
PN JP 2002522510-A/1  
PD 23-JUL-2002  
PF 06-AUG-1999 JP 2000564661  
PR 10-AUG-1998 US 60/095913,08-APR-1999 US 60/128608 PI  
PC CHARLOTTE A KENSIL  
A61K39/39,A61K39/00,C12N15/09,C12N15/00  
CC Compositions of CPG and saponin adjuvants and uses thereof FH  
Key Location/Qualifiers  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 19 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD228692  
DEFINITION Methods and adjuvants for stimulating mucosal immunity.  
ACCESSION BD228692  
VERSION BD228692.1 GI:33038462  
KEYWORDS JP 2002526425-A/21.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Raz,B., Horner,A.A. and Carson,D.A.  
TITLE Methods and adjuvants for stimulating mucosal immunity  
JOURNAL Patent: JP 2002526425-A 21 20-AUG-2002;  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
COMMENT OS unidentified  
PN JP 2002526425-A/21  
PD 20-AUG-2002  
PF 15-SEP-1999 JP 2000573397  
PR 05-OCT-1998 US 09/167039  
PI RAZ,ANTHONY A HORNER,DENNIS A CARSON  
PC A61K39/39,A61K31/7088,A61K31/7105,A61K31/711,A61P11/00 PC  
PC A61P27/14,A61P37/04,  
PC C12N15/09,G01N33/15,G01N33/50//C12N5/10,G01N33/531,C12N15/00,  
CC 18-base, fully phosphorothioated oligonucleotide FH Key  
Location/Qualifiers  
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Location/Qualifiers  
1..18

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source

JOURNAL Patent: JP 2002514397-A 59 21-MAY-2002;  
CORY PHARMACEUTICALS GMBH,CORY PHARMACEUTICALS GROUP INC  
COMMENT OS Artificial Sequence  
PN JP 2002514397-A/59  
PD 21-MAY-2002  
PF 14-MAY-1999 JP 2000547969  
PR 14-MAY-1998 US 60/085516,02-FEB-1999 US 09/241653 PI  
PC C12N15/09,A61K31/70,A61K39/39,C07H21/04//A61K45/00,C12N15/00  
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FH Key Location/Qualifiers  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02; Indels 0; Gaps 0;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 17 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD205614  
DEFINITION Method of controlling hematopoiesis by using Cpg oligonucleotide.  
ACCESSION BD205614.1 GI:33015384  
VERSION JP 2002514397-A/104.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Wagner,H. and Lipford,G.  
TITLE Method of controlling hematopoiesis by using Cpg oligonucleotide  
JOURNAL Patent: JP 2002514397-A 104 21-MAY-2002;  
CORY PHARMACEUTICALS GMBH,CORY PHARMACEUTICALS GROUP INC  
COMMENT OS Artificial Sequence  
PN JP 2002514397-A/104  
PD 21-MAY-2002  
PF 14-MAY-1999 JP 2000547969  
PR 14-MAY-1998 US 60/085516,02-FEB-1999 US 09/241653 PI  
PC C12N15/09,A61K31/70,A61K39/39,C07H21/04//A61K45/00,C12N15/00  
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FH Key Location/Qualifiers  
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ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02; Indels 0; Gaps 0;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 18 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD222609  
DEFINITION Compositions of CPG and saponin adjuvants and uses thereof.  
ACCESSION BD222609  
VERSION BD222609.1 GI:33032379  
KEYWORDS Quillaia saponaria  
SOURCE Quillaia saponaria  
ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids I; Fabales; Quillajaaceae; Quillaia.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Kensil,C.A.  
TITLE Compositions of CPG and saponin adjuvants and uses thereof  
JOURNAL Patent: JP 2002522510-A 1 23-JUL-2002;  
AQUILA BIOPHARMACEUTICALS INC  
COMMENT OS Quillaia saponaria  
PN JP 2002522510-A/1  
PD 23-JUL-2002  
PF 06-AUG-1999 JP 2000564661  
PR 10-AUG-1998 US 60/095913,08-APR-1999 US 60/128608 PI  
PC CHARLOTTE A KENSIL  
A61K39/39,A61K39/00,C12N15/09,C12N15/00  
CC Compositions of CPG and saponin adjuvants and uses thereof FH  
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Query Match 100.0%; Score 18; DB 6; Length 18;  
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QY 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 19 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD228692  
DEFINITION Methods and adjuvants for stimulating mucosal immunity.  
ACCESSION BD228692  
VERSION BD228692.1 GI:33038462  
KEYWORDS JP 2002526425-A/21.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Raz,B., Horner,A.A. and Carson,D.A.  
TITLE Methods and adjuvants for stimulating mucosal immunity  
JOURNAL Patent: JP 2002526425-A 21 20-AUG-2002;  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
COMMENT OS unidentified  
PN JP 2002526425-A/21  
PD 20-AUG-2002  
PF 15-SEP-1999 JP 2000573397  
PR 05-OCT-1998 US 09/167039  
PI RAZ,ANTHONY A HORNER,DENNIS A CARSON  
PC A61K39/39,A61K31/7088,A61K31/7105,A61K31/711,A61P11/00 PC  
PC A61P27/14,A61P37/04,  
PC C12N15/09,G01N33/15,G01N33/50//C12N5/10,G01N33/531,C12N15/00,  
CC 18-base, fully phosphorothioated oligonucleotide FH Key  
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source



ORIGIN /organism="unidentified"  
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Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 20  
BD247888 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD247888  
DEFINITION Antisense oligonucleotide containing universal and/or homonymous base.  
ACCESSION BD247888  
VERSION BD247888.1 GI:33057658  
KEYWORDS JP 2002541825-A/20.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Brown, B.D. and Riley, T.A.  
TITLE Antisense oligonucleotide containing universal and/or homonymous  
JOURNAL Patent: JP 2002541825-A 20 10-DEC-2002;  
OASIS BIOSCIENCES INC  
COMMENT OS Artificial Sequence  
PN JP 2002541825-A/20  
PD 10-DEC-2002 JP 200611732  
PF 07-APR-2000 JP 200611732  
PR 08-APR-1999 US 60/128377  
PI BOB D BROWN, TIMOTHY A RILEY  
PC C12N15/09, C12N9/00, C12N15/00  
CC Synthetic oligonucleotide primers  
FH Key Location/Qualifiers  
FT source 1..18  
FEATURES Location/Qualifiers  
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/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

ORIGIN

Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 21  
BD251268 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD251268  
DEFINITION Enhancement of Neisseria antigen bactericidal activity using CG motif-containing oligonucleotide.  
ACCESSION BD251268  
VERSION BD251268.1 GI:33061038  
KEYWORDS JP 2002537353-A/4.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Grandi, G., Rappuoli, R., Giuliani, M.M. and Pizzia, M.  
TITLE Enhancement of Neisseria antigen bactericidal activity using CG motif-containing oligonucleotide  
JOURNAL Patent: JP 2002537353-A 4 05-NOV-2002;

COMMENT CHIRON SPA  
OS Artificial Sequence  
PN JP 2002537353-A/4  
PD 05-NOV-2002  
PF 09-FEB-2000 JP 200600685  
PR 26-FEB-1999 US 60/121792  
PI GUIDO GRANDI, RINO RAPPUOLI, MARZIA MONICA GIULIANI, MARIAGRAZIA PIZZA  
PC A61K39/095, A61K31/7088, A61K39/39, A61P31/04//C07K14/22, C12N15/09, C12N15/00  
CC oligonucleotide adjuvant  
FH Key Location/Qualifiers  
FT source 1..18  
FEATURES Location/Qualifiers  
source 1..18  
/organism="Artificial Sequence".  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

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Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 22  
BD261111 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD261111  
DEFINITION Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines.  
ACCESSION BD261111  
VERSION BD261111.1 GI:33070881  
KEYWORDS JP 2002510644-A/59.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Krieg, A.M. and Weiner, G.  
TITLE Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines  
JOURNAL Patent: JP 2002510644-A 59 09-APR-2002;  
UNIVERSITY OF IOWA RESEARCH FOUNDATION  
COMMENT OS Artificial Sequence  
PN JP 2002510644-A/59  
PD 09-APR-2002 JP 2000542030  
PF 02-APR-1999 JP 2000542030  
PR 03-APR-1998 US 60/080729  
PI ARTHUR M KRIEG, GEORGE WEINER  
PC A61K38/00, A61K31/7088, A61K39/00, A61P15/00, A61P35/00, A61P37/04,  
PC A61K37/02  
CC Synthetic Sequence  
FH Key Location/Qualifiers  
FT source 1..18  
FEATURES Location/Qualifiers  
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/organism="synthetic construct"  
/mol\_type="genomic DNA"  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

FEATURES	CC	immunostimulatory synthetic oligonucleotide
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		1..18
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		/mol_type="genomic DNA"
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QY	1	TCTCCAGCGTGCGCCAT 18
Db	1	TCTCCAGCGTGCGCCAT 18
RESULT 25		
LOCUS	BD261561	18 bp DNA linear PAT 17-JUL-2003
DEFINITION	BD261561	Vaccine.
ACCESSION	BD261561.1	GI:33071329
VERSION	UP 2002542203-A/2.	
KEYWORDS	UP 2002542203-A/2.	
SOURCE	Homo sapiens	(human)
ORGANISM	Homo sapiens	
REFERENCE	1 (bases 1 to 18)	
AUTHORS	Friede,M., Garcon,N. and Hermand,P.	
TITLE	Vaccine	
JOURNAL	Patent: JP 2002542203-A 2 10-DEC-2002;	
COMMENT	SMITHKLINE BEECHAM BIOLOGICALS SA	
	OS Homo sapiens (human)	
	PN UP 2002542203-A/2	
	PD 10-DEC-2002	
	PF 04-APR-2000 UP 2000611936	
	PR 19-APR-1999 GB 9908885.8.29-APR-1999 US	09/301829 PI
	MARTIN PRIEBE,NATHALIE GARCON,PHILIPPE HERMAND PC	
	AKIK39/39,AKIK31/7088,AKIK39/00,AKIK39/00,AKIK39/02,PC	
	AKIK39/035,AKIK39/10,AKIK39/102,AKIK39/112,AKIK39/118,AKIK39/12,AKIK39/	
	PC 145,AKIK39/21,	
	PC AKIK39/245,AKIK39/25,AKIK39/29,AKIP9/10,AKIP25/28,AKIP31/04,	
	PC AKIP31/12,	
	PC AKIP33/00,AKIP33/02,AKIP35/00,AKIP37/04,AKIP37/08,AKIP43/00,	
	PC C12N15/09,	
	CC C12N15/00	
	CC Vaccine	
	FT key	Location/Qualifiers
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Query Match	100.0%;	Score 18; DB 6; Length 18;
Best Local Similarity	100.0%;	Pred. No. 3.2e+02;
Matches	18; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
QY	1	TCTCCAGCGTGCGCCAT 18
Db	1	TCTCCAGCGTGCGCCAT 18

BD267876 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD267876 Methods for the prevention and treatment of parasitic infections  
DEFINITION and related diseases using CPG oligonucleotides.  
ACCESSION BD267876.1 GI:33077644  
VERSION JP 2002513763-A/49.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Gramzinski, R.A., Krieg, A.M., Davis, H.L. and Hoffman, S.L.  
TITLE Methods for the prevention and treatment of parasitic infections  
JOURNAL and related diseases using CPG oligonucleotides  
Patent: JP 2002513763-A 49 14-MAY-2002;  
UNIVERSITY OF IOWA RESEARCH FOUNDATION, OTTAWA CIVIC LOEB RESEARCH  
INSTITUTE, UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY  
OF THE NAVY  
COMMENT OS Artificial Sequence  
PN JP 2002513763-A/49  
PD 14-MAY-2002  
PF 06-MAY-1999 JP 2000546780  
PR 06-MAY-1998 US 60/084512  
PI ROBERT A GRAMZINSKI, ARTHUR M KRIEG, HEATHER L DAVIS, STEPHEN L  
PI HOFFMAN  
PC A61K31/711, A61K9/127, A61K38/00, A61K38/22, A61K45/00, A61P31/00,  
PC C12N15/09, A61K37/02, A61K37/24, C12N15/00  
CC Synthetic Sequence  
FH Key  
FT source  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
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Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
1 |||||  
1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 27  
BD267916 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD267916 Methods for the prevention and treatment of parasitic infections  
DEFINITION and related diseases using CPG oligonucleotides.  
ACCESSION BD267916.1 GI:33077684  
VERSION JP 2002513763-A/89.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Gramzinski, R.A., Krieg, A.M., Davis, H.L. and Hoffman, S.L.  
TITLE Methods for the prevention and treatment of parasitic infections  
JOURNAL and related diseases using CPG oligonucleotides  
Patent: JP 2002513763-A 89 14-MAY-2002;  
UNIVERSITY OF IOWA RESEARCH FOUNDATION, OTTAWA CIVIC LOEB RESEARCH  
INSTITUTE, UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY  
OF THE NAVY  
COMMENT OS Artificial Sequence  
PN JP 2002513763-A/89  
PD 14-MAY-2002  
PF 06-MAY-1999 JP 2000546780  
PR 06-MAY-1998 US 60/084512  
PI ROBERT A GRAMZINSKI, ARTHUR M KRIEG, HEATHER L DAVIS, STEPHEN L

PI HOFFMAN  
PC A61K31/711, A61K9/127, A61K38/00, A61K38/22, A61K45/00, A61P31/00,  
PC A61P33/00//  
PC C12N15/09, A61K37/02, A61K37/24, C12N15/00  
CC Synthetic Sequence  
FH Key  
FT source  
FEATURES 1. 18  
Location/Qualifiers  
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/db\_xref="taxon:32630"  
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Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
1 |||||  
1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 28  
BD270778 18 bp DNA linear PAT 17-JUL-2003  
LOCUS BD270778 Stereoisomer of Cpg oligonucleotide and method relating thereto.  
DEFINITION BD270778.1 GI:33080546  
ACCESSION BD270778.1 GI:33080546  
VERSION JP 2002521489-A/51.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Krieg, A.M.  
TITLE Stereoisomer of Cpg oligonucleotide and method relating thereto  
JOURNAL Patent: JP 2002521489-A 51 16-JUL-2002;  
UNIVERSITY OF IOWA RESEARCH FOUNDATION  
OS Artificial Sequence  
PN JP 2002521489-A/51  
PD 16-JUL-2002  
PF 27-JUL-1999 JP 2000562385  
PR 27-JUL-1998 US 60/094370  
PI ARTHUR M KRIEG  
PC A61K31/711, A61P11/06, A61P17/00, A61P27/02, A61P29/00, A61P31/00,  
PC A61P33/00, A61P37/04, A61P37/06, A61P37/08  
CC Synthetic  
FH Key  
FT source  
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Location/Qualifiers  
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/db\_xref="taxon:32630"  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
1 |||||  
1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 29  
CQ788114 18 bp DNA linear PAT 24-MAR-2004  
LOCUS CQ788114  
DEFINITION Sequence 45 from Patent WO2004019979.  
ACCESSION CQ788114

VERSION CQ788114.1 GI:45723022  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Ellis, J.H. and Ashman, C.  
JOURNAL Vaccine  
Patent: WO 2004019979-A 45 11-MAR-2004;  
GLAXO GROUP LIMITED (GB)  
FEATURES  
source  
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/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="artificial immunostimulatory oligonucleotide"  
ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 30  
LOCUS CQ788200 18 bp DNA PAT 24-MAR-2004  
DEFINITION Sequence 63 from Patent WO2004019974.  
ACCESSION CQ788200  
VERSION CQ788200.1 GI:45723050  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;  
Homnidae; Homo.  
REFERENCE 1  
AUTHORS Ashman, C. and Ellis, J.H.  
JOURNAL Vaccine  
Patent: WO 2004019974-A 63 11-MAR-2004;  
GLAXO GROUP LIMITED (GB); GlaxoSmithKline (GB)  
FEATURES  
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/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 31  
LOCUS CQ815136 18 bp DNA PAT 24-MAY-2004  
DEFINITION Sequence 25 from Patent WO2004031222.  
ACCESSION CQ815136  
VERSION CQ815136.1 GI:47604214  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Gough, G.W. and Roberts, C.M.  
JOURNAL Vaccine

JOURNAL Patent: WO 2004031222-A 25 15-APR-2004;  
GLAXO GROUP LIMITED (GB)  
FEATURES  
source  
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/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="immunostimulatory oligonucleotide"  
ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 32  
LOCUS CQ829541 18 bp DNA PAT 05-JUL-2004  
DEFINITION Sequence 5 from Patent WO2004052909.  
ACCESSION CQ829541  
VERSION CQ829541.1 GI:49732852  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Catchpole, I.R.  
JOURNAL Novel compositions  
Patent: WO 2004052909-A 5 24-JUN-2004;  
GLAXO GROUP LIMITED (GB)  
FEATURES  
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/note="artificial sequence"  
ORIGIN  
Query Match 100.0%; Score 18; DB 6; Length 18;  
Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 33  
LOCUS CQ830283 18 bp DNA PAT 12-JUL-2004  
DEFINITION Sequence 19 from Patent WO2004054657.  
ACCESSION CQ830283  
VERSION CQ830283.1 GI:50250776  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Eliez, V.  
JOURNAL Combined antisense oligonucleotide cancer therapy  
Patent: WO 2004054657-A 19 01-JUL-2004;  
Eliez, Vera (DE)  
FEATURES  
source  
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/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="antisense Oligonucleotide"  
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 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 34  
 LOCUS CS0892008 18 bp DNA linear PAT 01-NOV-2004  
 DEFINITION Sequence 51 from Patent WO2004087203.  
 ACCESSION CS0892008  
 VERSION CQ892008.1 GI:55164566  
 KEYWORDS  
 SOURCE synthetic construct  
 ORGANISM synthetic construct  
 other sequences; artificial sequences.

REFERENCE 1  
 AUTHORS Davis, H.L. and McCluskie, M.J.  
 TITLE Immunostimulatory nucleic acid oil-in-water formulations and related methods of use  
 JOURNAL Patent: WO 2004087203-A 51 14-OCT-2004;  
 Coley Pharmaceutical Group, Ltd. (CA)  
 FEATURES 1.18  
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 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:32630"  
 /note="Oligonucleotide"

ORIGIN

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QY 1 TCTCCAGCGTGGCCAT 18  
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 1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 35  
 LOCUS CS057844 18 bp DNA linear PAT 04-APR-2005  
 DEFINITION Sequence 18 from Patent WO2005025614.  
 ACCESSION CS057844  
 VERSION CS057844.1 GI:62242507  
 KEYWORDS  
 SOURCE synthetic construct  
 ORGANISM synthetic construct  
 other sequences; artificial sequences.

REFERENCE 1  
 AUTHORS Bembridge, G.P. and Craigen, J.L.  
 TITLE Improvements in vaccination  
 JOURNAL Patent: WO 2005025614-A 18 24-MAR-2005;  
 Glaxo Group Limited (GB)  
 FEATURES 1.18  
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 /db\_xref="taxon:32630"  
 /note="Artificial oligonucleotide"

ORIGIN

Query Match 100.0%; Score 18; DB 6; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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 1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 36  
 LOCUS CS080249 18 bp DNA linear PAT 09-MAY-2005  
 DEFINITION Sequence 1 from Patent WO2005038052.  
 ACCESSION CS080249  
 VERSION CS080249.1 GI:63107958  
 KEYWORDS  
 SOURCE synthetic construct  
 ORGANISM synthetic construct  
 other sequences; artificial sequences.

REFERENCE 1  
 AUTHORS Wittenberger, T., Hofmann, H.P., Gekeler, V. and Stein, C.A.  
 TITLE Method for identifying interferon mimics  
 JOURNAL Patent: WO 2005038052-A 1 28-APR-2005;  
 Altana Pharma AG (DE)  
 FEATURES 1.18  
 source /organism="synthetic construct"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:32630"  
 /note="phosphorothioate oligodeoxynucleotide G3139"

ORIGIN

Query Match 100.0%; Score 18; DB 6; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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 1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 37  
 LOCUS CS083014 18 bp DNA linear PAT 18-MAY-2005  
 DEFINITION Sequence 4 from Patent WO2005039634.  
 ACCESSION CS083014  
 VERSION CS083014.1 GI:66349585  
 KEYWORDS  
 SOURCE synthetic construct  
 ORGANISM synthetic construct  
 other sequences; artificial sequences.

REFERENCE 1  
 AUTHORS Bruck, C.E., Gerard, C.M. and Jonak, Z.L.  
 TITLE Vaccine compositions comprising an interleukin 18 and saponin adjuvant system  
 JOURNAL Patent: WO 2005039634-A 4 06-MAY-2005;  
 GlaxoSmithKline Biologicals S.A. (BE); SmithKline Beecham Corporation (US)  
 FEATURES 1.18  
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 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:32630"  
 /note="Cpg 1758"

ORIGIN

Query Match 100.0%; Score 18; DB 6; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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 1 TCTCCAGCGTGGCCAT 18

Db 1 TCTCCAGCGTGGCCAT 18

RESULT 38  
 LOCUS CS088752 18 bp DNA linear PAT 25-MAY-2005  
 DEFINITION Sequence 2 from Patent WO2005039630.

ACCESSION CS088752  
 VERSION CS088752.1 GI:66714132  
 KEYWORDS  
 SOURCE  
 ORGANISM  
 synthetic construct  
 other sequences; artificial sequences.

REFERENCE  
 1  
 AUTHORS Bruck, C.E., Gerard, C.M. and Jonak, Z.L.  
 TITLE Immunogenic compositions  
 JOURNAL Patent: WO 2005039630-A 2 06-MAY-2005;  
 GlaxoSmithKline Biologicals S.A. (BE); SmithKline Beecham Corporation (US)

FEATURES  
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 /db\_xref="taxon:32630"  
 /note="Artificial Immunostimulatory Oligonucleotide"

ORIGIN  
 Query Match 100.0%; Score 18; DB 6; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
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 1 TCTCCAGCGTGGCCCAT 18

Db 1 TCTCCAGCGTGGCCCAT 18

RESULT 39  
 CS110648 18 bp DNA linear PAT 22-JUN-2005  
 LOCUS  
 DEFINITION Sequence 2 from Patent EP1541170.  
 ACCESSION CS110648  
 VERSION CS110648.1 GI:68148833  
 KEYWORDS  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homnidae; Homo.

REFERENCE  
 1  
 AUTHORS Friede, M., Garcon, N. and Hermand, P.  
 TITLE Adjuvant composition comprising saponin and an immunostimulatory oligonucleotide  
 JOURNAL Patent: EP 1541170-A 2 15-JUN-2005;  
 GlaxoSmithKline Biologicals S.A. (BE)

FEATURES  
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ORIGIN  
 Query Match 100.0%; Score 18; DB 6; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
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 1 TCTCCAGCGTGGCCCAT 18

Db 1 TCTCCAGCGTGGCCCAT 18

RESULT 40  
 CS124144 18 bp DNA linear PAT 21-JUL-2005  
 LOCUS  
 DEFINITION Sequence 56 from Patent WO2005061710.  
 ACCESSION CS124144  
 VERSION CS124144.1 GI:71057250  
 KEYWORDS  
 SOURCE synthetic construct  
 ORGANISM other sequences; artificial sequences.

REFERENCE  
 1  
 AUTHORS Frieden, M.  
 TITLE Oligomeric compounds for the modulation of bcl-2  
 JOURNAL Patent: WO 2005061710-A 56 07-JUL-2005;  
 Santaris Pharma A/S (DK)

FEATURES  
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 /mol\_type="unassigned DNA"  
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 /note="Synthetic Oligonucleotide sequence"

ORIGIN  
 Query Match 100.0%; Score 18; DB 6; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCCAT 18  
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RESULT 41  
 196098 18 bp DNA linear PAT 01-DEC-1998  
 LOCUS  
 DEFINITION Sequence 17 from patent US 5734033.  
 ACCESSION 196098  
 VERSION 196098.1 GI:3940568  
 KEYWORDS  
 SOURCE Unknown.  
 ORGANISM Unknown.  
 Unclassified.

REFERENCE  
 1 (bases 1 to 18)  
 AUTHORS Reed, J.  
 JOURNAL Antisense oligonucleotides inhibiting human bcl-2 gene expression  
 Patent: US 5734033-A 17 31-MAR-1998;

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RESULT 42  
 AR213851 18 bp DNA linear PAT 25-SEP-2002  
 LOCUS  
 DEFINITION Sequence 51 from patent US 6406705.  
 ACCESSION AR213851  
 VERSION AR213851.1 GI:23311250  
 KEYWORDS  
 SOURCE Unknown.  
 ORGANISM Unknown.  
 Unclassified.

REFERENCE  
 1 (bases 1 to 18)  
 AUTHORS Davis, H.L., Schorr, J. and Krieg, A.M.  
 TITLE Use of nucleic acids containing unmetlylated Cpg dinucleotide as an adjuvant  
 JOURNAL Patent: US 6406705-A 51 18-JUN-2002;  
 University of Iowa Research Foundation, Coley Pharmaceutical GmbH and Ottawa Health Research Institute; Iowa City, IA

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RESULT 43  
LOCUS AR222219 18 bp DNA linear PAT 26-SEP-2002  
DEFINITION Sequence 53 from patent US 6429199.  
ACCESSION AR222219  
VERSION AR222219.1 GI:23329684  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Krieg, A.M. and Hartmann, G.  
TITLE Immunostimulatory nucleic acid molecules for activating dendritic cells  
JOURNAL Patent: US 6429199-A 53 06-AUG-2002;  
University of Iowa Research Foundation; Iowa City, IA

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RESULT 44  
LOCUS AR279799 18 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 45 from patent US 6518017.  
ACCESSION AR279799  
VERSION AR279799.1 GI:29714944  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Riley, T.A., Brown, B.D. and Arnold, L.J.  
TITLE Combinatorial antisense library  
JOURNAL Patent: US 6518017-A 45 11-PEB-2003;  
Oasis Biosciences Incorporated; San Diego, CA

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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 45  
LOCUS AR303119 18 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 2 from patent US 6544518.  
ACCESSION AR303119  
VERSION AR303119.1 GI:31691791  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Friede, M., Garcon, N., Gerard, C.M.G. and Hermand, P.  
TITLE Vaccines  
JOURNAL Patent: US 6544518-A 2 08-APR-2003;  
SmithKline Beecham Biologicals s.a.; Rixensart; GBX;

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RESULT 46  
LOCUS AR309880 18 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 2 from patent US 6558670.  
ACCESSION AR309880  
VERSION AR309880.1 GI:31702012  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Friede, M. and Hermand, P.  
TITLE Vaccine adjuvants  
JOURNAL Patent: US 6558670-A 2 06-MAY-2003;  
SmithKline Beecham Biologicals s.a.; Rixensart; BEX;

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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 47  
LOCUS AR359625 18 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 218 from patent US 6593305.  
ACCESSION AR359625  
VERSION AR359625.1 GI:3376348  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Wright, J.A.  
TITLE Antitumor antisense sequences directed against R1 and R2 components

LOCUS AR303119 18 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 2 from patent US 6544518.  
ACCESSION AR303119  
VERSION AR303119.1 GI:31691791  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Friede, M., Garcon, N., Gerard, C.M.G. and Hermand, P.  
TITLE Vaccines  
JOURNAL Patent: US 6544518-A 2 08-APR-2003;  
SmithKline Beecham Biologicals s.a.; Rixensart; GBX;

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LOCUS AR309880 18 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 2 from patent US 6558670.  
ACCESSION AR309880  
VERSION AR309880.1 GI:31702012  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Friede, M. and Hermand, P.  
TITLE Vaccine adjuvants  
JOURNAL Patent: US 6558670-A 2 06-MAY-2003;  
SmithKline Beecham Biologicals s.a.; Rixensart; BEX;

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RESULT 47  
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DEFINITION Sequence 218 from patent US 6593305.  
ACCESSION AR359625  
VERSION AR359625.1 GI:3376348  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 18)  
AUTHORS Wright, J.A.  
TITLE Antitumor antisense sequences directed against R1 and R2 components

of ribonucleotide reductase  
JOURNAL Patent: US 6593305-A 218 15-JUL-2003;  
GeneSense Technologies Inc.; Toronto;  
CAN;

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RESULT 48  
AR432468 18 bp DNA linear PAT 18-DEC-2003  
LOCUS AR432468  
DEFINITION Sequence 45 from patent US 6653292.  
ACCESSION AR432468  
VERSION AR432468.1 GI:40194803  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE Unclassified.  
AUTHORS 1 (bases 1 to 18)  
TITLE Krieg, A.M. and Wehner, G.  
JOURNAL Method of treating cancer using immunostimulatory oligonucleotides  
Patent: US 6653292-A 45 25-NOV-2003;  
University of Iowa Research Foundation; Iowa City, IA  
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QY 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 49  
AR577305 18 bp DNA linear PAT 14-DEC-2004  
LOCUS AR577305  
DEFINITION Sequence 21 from patent US 677544.  
ACCESSION AR577305  
VERSION AR577305.1 GI:56579839  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE Unclassified.  
AUTHORS 1 (bases 1 to 18)  
TITLE Uhlmann, E., Breipohl, G. and Will, D.W.  
JOURNAL Polyamide nucleic acid derivatives and agents and processes for  
preparing them  
Patent: US 677544-A 21 17-AUG-2004;  
Aventis Pharma Deutschland GmbH; Frankfurt;  
DEX;

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Db 1 TCTCCAGCGTGGCCAT 18

RESULT 50  
AR608703/C 18 bp DNA linear PAT 15-DEC-2004  
LOCUS AR608703  
DEFINITION Sequence 7 from patent US 6822086.  
ACCESSION AR608703  
VERSION AR608703.1 GI:5663389  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE Unclassified.  
AUTHORS 1 (bases 1 to 18)  
TITLE Papisov, M.I.  
JOURNAL Drug-carrier complexes and methods of use thereof  
Patent: US 6822086-A 7 23-NOV-2004;  
The General Hospital Corporation; Boston, MA  
Location/Qualifiers  
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Best Local Similarity 100.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
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Db 1 TCTCCAGCGTGGCCAT 1

Search completed: February 17, 2006, 20:03:11  
Job time : 1719 secs



GenCore version 5.1.7  
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM nucleic + nucleic search, using bw model

Run on: February 17, 2006, 19:19:20 : Search time 479 Seconds  
(without alignments)  
250.448 Million cell updates/sec

Title: US-10-822-205-1

Perfect score: 18

Sequence: 1 tctccagcgctgcgcac 18

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 4996997 seqs, 3332346308 residues

Total number of hits satisfying chosen parameters: 4138570

Minimum DB seq length: 0  
Maximum DB seq length: 30

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 1000 summaries

Database :

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2: geneseqn19808.\*  
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13: geneseqn2004bs.\*  
14: geneseqn2005s.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match length	ID	Description
1	18	100.0	18 2 AAO86659	Aag66659 Bcl-2 ant
2	18	100.0	18 2 AAV52545	Aav52545 Tumor nec
3	18	100.0	18 2 AAV28181	Aav28181 Antisense
4	18	100.0	18 2 AAV27719	Aav27719 Immuno
5	18	100.0	18 2 AAV19667	Aav19667 Human bcl
6	18	100.0	18 2 AA241948	AA241948 IL-12 sec
7	18	100.0	18 2 AA241905	AA241905 IL-12 sec
8	18	100.0	18 2 AAX78803	Aax78803 HPV fusio
9	18	100.0	18 2 AAV99434	Aav99434 Antisense
10	18	100.0	18 2 AA231944	AA231944 Cpg adjuv
11	18	100.0	18 2 AAX27536	Aax27536 Synthetic
12	18	100.0	18 2 AAX18702	Aax18702 Target bc
13	18	100.0	18 2 AAX88537	Aax88537 Cytochrome
14	18	100.0	18 2 AAX33514	Aax33514 Bcl2-targ
15	18	100.0	18 2 AAX23693	Aax23693 Deletion
16	18	100.0	18 3 AAZ60975	Aaz60975 Nucleotid
17	18	100.0	18 3 AAZ48024	Aaz48024 Immune re
18	18	100.0	18 3 AAZ47981	Aaz47981 Immune re
19	18	100.0	18 3 AAA14470	AAA14470 Phosphoro

20	18	100.0	18 3 AAZ87997	Aaz87997 BTE-labe
21	18	100.0	18 3 AAZ47850	Aaz47850 Immuno
22	18	100.0	18 3 AAA38517	AAA38517 Oligonuc
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24	18	100.0	18 3 AAZ99003	AAZ99003 Cpg motif
25	18	100.0	18 3 AAZ98660	Aaz98660 Human Bcl
26	18	100.0	18 3 AAA39264	AAA39264 Cpg immu
27	18	100.0	18 3 AAZ47680	Aaz47680 Parasitic
28	18	100.0	18 3 AAZ47643	Aaz47643 Parasitic
29	18	100.0	18 3 AAA91620	AAA91620 Human Bcl
30	18	100.0	18 3 AAC60278	Aac60278 Immuno
31	18	100.0	18 3 AAC65037	Aac65037 Bcl2 anti
32	18	100.0	18 3 AAC64137	Aac64137 Immuno
33	18	100.0	18 4 AAH20395	AAH20395 Cpg motif
34	18	100.0	18 4 AAH50615	AAH50615 Natural k
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36	18	100.0	18 4 AAH19305	AAH19305 Cpg oligo
37	18	100.0	18 4 AAF98832	AAF98832 Cpg immu
38	18	100.0	18 4 AAF59502	AAF59502 Immuno
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40	18	100.0	18 4 AAF98929	AAF98929 Immuno
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43	18	100.0	18 4 AA92362	AA92362 CG motif
44	18	100.0	18 5 AAS08980	AAS08980 Cpg-conta
45	18	100.0	18 5 AAF27748	AAF27748 P. falci
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59	18	100.0	18 6 ABR73938	ABR73938 Cpg oligo
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74	18	100.0	18 8 ABR276751	ABR276751 Phosphoro
75	18	100.0	18 8 ACC59107	ACC59107 Cpg oligo
76	18	100.0	18 8 ABR80168	ABR80168 Immuno
77	18	100.0	18 8 ABR89006	ABR89006 Human bcl
78	18	100.0	18 8 ABR89852	ABR89852 Cancer me
79	18	100.0	18 8 ABR22867	ABR22867 Phosphoro
80	18	100.0	18 8 ACA92708	ACA92708 Immuno
81	18	100.0	18 9 ACD99315	ACD99315 Immuno
82	18	100.0	18 9 ACD99329	ACD99329 Immuno
83	18	100.0	18 9 ACC58501	ACC58501 Oligonuc
84	18	100.0	18 9 ACC58516	ACC58516 Oligonuc
85	18	100.0	18 9 ADA24232	ADA24232 Human bcl
86	18	100.0	18 9 ABR36468	ABR36468 Immuno
87	18	100.0	18 9 ABR36431	ABR36431 Immuno
88	18	100.0	18 9 ABR36432	ABR36432 Immuno
89	18	100.0	18 9 ABR36387	ABR36387 Immuno
90	18	100.0	18 10 ADC24658	ADC24658 Antisense
91	18	100.0	18 10 ADC33583	ADC33583 Human bcl
92	18	100.0	18 10 AAD60214	AAD60214 Oligonuc

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95	18	100.0	18	10	ADF68147	Adf68147	Urmethyla	c 168	17	94.4	17	14	ADV65743	Adv65743	Sense str
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97	18	100.0	18	10	ABX76040	Abx76040	Immunost	170	16.4	91.1	18	2	AAV47681	Aav47681	Urmethyla
98	18	100.0	18	10	ACA58705	AcA58705	Gastric u	171	16.4	91.1	18	2	AAV27733	Aav27733	Immunost
99	18	100.0	18	11	ADM41180	Adm41180	Human ant	172	16.4	91.1	18	2	AAZ41918	Aaz41918	IL-12 sec
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101	18	100.0	18	12	ADBS90170	Adbs90170	Human bcl	174	16.4	91.1	18	3	AAZ47655	Aaz47655	Parabatic
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103	18	100.0	18	12	ADBS9689	Adbs9689	Oligonuc	176	16.4	91.1	18	4	AAFR98954	Aafr98954	Immunost
104	18	100.0	18	12	ADf42925	Adf42925	Methylate	177	16.4	91.1	18	4	AAFR98953	Aafr98953	Immunost
105	18	100.0	18	12	ADf42910	Adf42910	Methylate	178	16.4	91.1	18	4	AAFR99277	Aafr99277	Immunost
106	18	100.0	18	12	ADf101087	Adf101087	Immunost	179	16.4	91.1	18	6	ABST77922	Abst77922	Angiogene
107	18	100.0	18	12	ADL64033	Adl64033	CPG DNA o	180	16.4	91.1	18	6	ABST77595	Abst77595	Angiogene
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109	18	100.0	18	12	ADL97920	Adl97920	Immunost	182	16.4	91.1	18	6	ABL39318	AbL39318	Immunost
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111	18	100.0	18	12	ADM99056	Adm99056	Immunost	184	16.4	91.1	18	6	ABL39328	AbL39328	Immunost
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117	18	100.0	18	13	ADR61963	Adr61963	Mitogenic	190	16.4	91.1	18	9	ACD99386	AcD99386	Immunost
118	18	100.0	18	13	ADR04172	Adr04172	Novel imm	191	16.4	91.1	18	9	ADB36779	AdB36779	Immunost
119	18	100.0	18	13	ADR93913	Adr93913	Antisense	192	16.4	91.1	18	9	ADB36456	AdB36456	Immunost
120	18	100.0	18	13	ADU70267	Adu70267	Immunost	193	16.4	91.1	18	9	ADB36455	AdB36455	Immunost
121	18	100.0	18	13	ADU70021	Adu70021	Immunost	194	16.4	91.1	18	10	ADB60227	AdB60227	Oligonuc
122	18	100.0	18	13	ADU89317	Adu89317	Allergic	195	16.4	91.1	18	10	ADG68172	AdG68172	Urmethyla
123	18	100.0	18	13	ADU89407	Adu89407	Allergic	196	16.4	91.1	18	10	ACF36815	AcF36815	Immunost
124	18	100.0	18	13	ADU89371	Adu89371	Allergic	197	16.4	91.1	18	10	ADT01112	AdT01112	Immunost
125	18	100.0	18	13	ADU89370	Adu89370	Allergic	198	16.4	91.1	18	12	ADM99081	AdM99081	Immunost
126	18	100.0	18	13	ADY78745	Ady78745	Antisense	199	16.4	91.1	18	12	ADU04799	AdU04799	CPG oligo
127	18	100.0	18	14	ADY11410	Ady11410	Bcl-2 ant	200	16.4	91.1	18	12	ADP86182	AdP86182	CPG immu
128	18	100.0	18	14	ADW12541	Adw12541	Human bcl	201	16.4	91.1	18	13	ADU89395	AdU89395	Allergic
129	18	100.0	18	14	ADW13853	Adw13853	Optimized	202	16.4	91.1	18	13	ADU89394	AdU89394	Allergic
130	18	100.0	18	14	ADW13846	Adw13846	Bcl-2 ORF	203	16.4	91.1	18	13	ADU89722	AdU89722	Allergic
131	18	100.0	18	14	ADW29230	Adw29230	Immunost	204	16.4	91.1	18	14	ADX87665	AdX87665	Hiv treat
132	18	100.0	18	14	ADM40254	Adm40254	Human bcl	205	16.4	91.1	18	14	ADZ88558	AdZ88558	CPG ODNI8
133	18	100.0	18	14	ADY53646	Ady53646	Anti-canc	206	16.4	91.1	18	14	ADZ88558	AdZ88558	CPG immu
134	18	100.0	18	14	ADY53638	Ady53638	Oligodeox	207	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
135	18	100.0	18	14	ADY71778	Ady71778	Control o	208	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
136	18	100.0	18	14	ADY84967	Ady84967	CPG oligo	209	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
137	18	100.0	18	14	ADZ39824	Adz39824	Immunost	c 210	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
138	18	100.0	18	14	ADZ39839	Adz39839	Immunost	211	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
139	18	100.0	18	14	ADZ77762	Adz77762	CPG adjuv	212	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
140	18	100.0	18	14	ADZ77752	Adz77752	CPG adjuv	213	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
141	18	100.0	18	14	ADZ88533	Adz88533	S-CPG ODN	214	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
142	18	100.0	18	14	ADZ58562	Adz58562	Phosphoro	215	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
143	18	100.0	18	14	AEA16639	Aea16639	CPG immu	216	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
144	18	100.0	18	14	ADZ84124	Adz84124	Human bcl	217	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
145	18	100.0	18	14	AE828241	Aeb28241	Human Bcl	218	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
146	18	100.0	18	14	AE807505	Aeb07505	Novel vit	219	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
147	18	100.0	18	14	AE850092	Aeb50092	Oligonuc	220	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
148	18	100.0	18	14	AE850092	Aeb50092	Oligonuc	221	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
149	18	100.0	18	14	AAV74246	Aav74246	CPG-N mot	222	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
150	18	100.0	18	14	AAV98962	Aav98962	Immunost	223	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
151	18	100.0	18	14	ABST7603	Abst7603	Angiogene	224	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
152	18	100.0	18	14	ABL39325	AbL39325	Immunost	225	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
153	18	100.0	18	14	ACD99395	AcD99395	Immunost	226	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
154	18	100.0	18	14	ADB36464	AdB36464	Immunost	227	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
155	18	100.0	18	14	ADU89403	Adu89403	Allergic	228	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
156	18	100.0	18	14	ADU65824	Adu65824	Antisense	229	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
157	18	100.0	18	14	ABK90353	Abk90353	Bcl-2 tar	230	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
158	18	100.0	18	14	ADM88846	Adm88846	Human Bcl	231	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
159	18	100.0	18	14	AAU18388	Aau18388	Human Bcl	232	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
160	18	100.0	18	14	ADF39399	Adf39399	Human Bcl	233	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
161	18	100.0	18	14	ADY71779	Ady71779	Signal se	234	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
162	18	100.0	18	14	ADY71781	Ady71781	Control o	235	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
163	18	100.0	18	14	ADY71780	Ady71780	Control o	236	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
164	18	100.0	18	14	ADR29366	Adr29366	Human Bcl	237	16.4	91.1	18	14	ABE16664	AbE16664	CPG immu
165	18	94.4	17	2	AAV19659	Aav19659	Human bcl	c 238	16	88.9	19	10	ADF49354	AdF49354	Human BCL

239	16	88.9	19	10	ADF49768	Adf49768 Human BCL	312	13.4	74.4	17	2	AAZ41917	Aaz41917 IL-12, Sec
240	15	83.3	15	6	ABK90360	Abk90360 Bcl-2-tar	313	13.4	74.4	17	3	AAZ60985	Aaz60985 Nucleotid
241	15	83.3	17	2	AAV19658	AAv19658 Human bcl1	314	13.4	74.4	17	3	AAZ47993	Aaz47993 Immune re
242	15	83.3	17	2	AAx88277	Aax88277 Human bcl1	315	13.4	74.4	17	3	AAZ47860	Aaz47860 Immunost1
243	15	83.3	17	14	ABE28226	AbE28226 Human bcl1	316	13.4	74.4	17	3	AAZ47654	Aaz47654 Parasitic
244	15	83.3	18	14	ABE28187	AbE28187 Human Bcl1	317	13.4	74.4	17	4	AAH50639	Aah50639 Natural K
245	15	83.3	18	14	ABE28191	AbE28191 Human Bcl1	318	13.4	74.4	17	4	AAE98851	Aae98851 CPg Immun
246	15	83.3	18	14	ABE28190	AbE28190 Human Bcl1	319	13.4	74.4	17	4	AAE98932	Aae98932 Immunost1
247	15	83.3	19	2	AAZ06730	Aaz06730 Antisense	320	13.4	74.4	17	6	ABE77593	AbE77593 Angiogene
248	15	83.3	21	2	AAZ06730	Aaz06730 Human bcl1	321	13.4	74.4	17	6	ABL39320	AbL39320 Immunost1
249	15	83.3	22	2	AAQ49817	Aaq49817 Bcl-2 ant	322	13.4	74.4	17	6	AAJ39239	Aaj39239 Murine To
250	15	83.3	22	2	AAQ49816	Aaq49816 Bcl-2 ant	323	13.4	74.4	17	6	ABE70576	AbE70576 Dendritic
251	14.8	82.2	18	3	AAa94235	Aaa94235 Murine Dc	324	13.4	74.4	17	8	ABX89862	Abx89862 Cancer me
252	14.8	82.2	18	4	AAE99279	Aae99279 Immunost1	325	13.4	74.4	17	9	ACA92718	Aca92718 Immunost1
253	14.8	82.2	18	4	AAE99280	Aae99280 Immunost1	326	13.4	74.4	17	9	ACD99385	AcD99385 Immunost1
254	14.8	82.2	18	6	ABE77924	AbE77924 Angiogene	327	13.4	74.4	17	9	ADB36454	AdB36454 Immunost1
255	14.8	82.2	18	6	ABE77925	AbE77925 Angiogene	328	13.4	74.4	17	10	AAAD60226	Aad60226 Oligonuc1
256	14.8	82.2	18	6	ABL39332	AbL39332 Immunost1	329	13.4	74.4	17	10	ADG68171	AdG68171 Unmethy1a
257	14.8	82.2	18	6	ABL39333	AbL39333 Immunost1	330	13.4	74.4	17	10	ACF36816	AcF36816 Immunost1
258	14.8	82.2	18	9	ACD99710	AcD99710 Immunost1	331	13.4	74.4	17	10	ABX76050	Abx76050 Immunost1
259	14.8	82.2	18	9	ACD99709	AcD99709 Immunost1	332	13.4	74.4	17	10	ACA58715	AcA58715 Gastric u
260	14.8	82.2	18	9	ADB36781	AdB36781 Immunost1	333	13.4	74.4	17	12	AD101111	Ad101111 Immunost1
261	14.8	82.2	18	9	ADB36782	AdB36782 Immunost1	334	13.4	74.4	17	12	ADM99080	Adm99080 Immunost1
262	14.8	82.2	18	10	ACF36407	AcF36407 Bcl-2 ant	335	13.4	74.4	17	12	ADQ004798	AdQ004798 CPg Oligo
263	14.8	82.2	18	11	ADM83078	AdM83078 Human TRP	336	13.4	74.4	17	12	ADQ007482	AdQ007482 Immunost1
264	14.8	82.2	18	13	ADP93914	AdP93914 Angiogene	337	13.4	74.4	17	13	ADP04182	AdP04182 Novel imm
265	14.8	82.2	18	13	ADP92418	AdP92418 Antisense	338	13.4	74.4	17	13	ADU89393	AdU89393 Allergic
266	14.8	82.2	18	13	ADP92441	AdP92441 Antisense	339	13.4	74.4	17	14	ADZ88557	AdZ88557 CPg ODN18
267	14.8	82.2	18	13	ADU89724	AdU89724 Allergic	340	13.4	74.4	17	14	AEH16633	Aeh16633 CPg Immun
268	14.8	82.2	18	13	ADU89725	AdU89725 Allergic	341	13.4	74.4	17	14	AEH16260	Aeh16260 NK lytic
269	14.8	82.2	20	6	ABE77624	AbE77624 Angiogene	342	13.4	74.4	18	11	ADM36049	AdM36049 Immunost1
270	14.8	82.2	20	6	ABE77624	AbE77624 Angiogene	343	13.4	74.4	18	14	ABE28240	AbE28240 Human Bcl1
271	14.8	82.2	20	6	ABL39338	AbL39338 Immunost1	344	13.4	74.4	18	14	ABE28211	AbE28211 Human Bcl1
272	14.8	82.2	20	9	ACD99415	AcD99415 Immunost1	345	13.4	74.4	18	14	ABE28212	AbE28212 Human Bcl1
273	14.8	82.2	20	9	ADB36485	AdB36485 Immunost1	346	13.4	74.4	18	14	ABE28239	AbE28239 Human Bcl1
274	14.8	82.2	20	13	ABK90359	AbK90359 Bcl-2-tar	347	13.4	74.4	18	14	ABE28238	AbE28238 Human Bcl1
275	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	348	13.4	74.4	18	14	ABE28213	AbE28213 Human Bcl1
276	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	349	13.4	74.4	20	13	ADT94135	AdT94135 Human B-c
277	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	350	13.2	73.3	20	5	AAH27724	Aah27724 Control a
278	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	351	13.2	73.3	18	10	AAAD64253	Aad64253 Control a
279	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	352	13.2	73.3	18	12	ADP86181	AdP86181 CPg Immun
280	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	353	13.2	73.3	19	14	ADV60786	Adv60786 Human end
281	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	354	13.2	73.3	19	14	ADV60697	Adv60697 Human end
282	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	355	13.2	73.3	20	9	ADB36487	AdB36487 Immunost1
283	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	356	13.2	73.3	20	6	ABE77626	AbE77626 Angiogene
284	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	357	13.2	73.3	20	6	ABL39337	AbL39337 Immunost1
285	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	358	13.2	73.3	20	9	ACD99417	AcD99417 Immunost1
286	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	359	13.2	73.3	20	9	ADB36487	AdB36487 Immunost1
287	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	360	13.2	73.3	20	13	ADU89426	AdU89426 Allergic
288	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	361	13.2	73.3	13	6	ABK90358	AbK90358 Bcl-2-tar
289	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	362	13.2	73.3	15	14	ABE28223	AbE28223 Human Bcl1
290	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	363	13.2	73.3	16	14	ABE28233	AbE28233 Human Bcl1
291	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	364	13.2	73.3	16	14	ABE28193	AbE28193 Human Bcl1
292	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	365	13.2	73.3	16	14	ABE28195	AbE28195 Human Bcl1
293	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	366	13.2	73.3	17	14	ABE28194	AbE28194 Human Bcl1
294	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	367	13.2	73.3	17	14	ABE28227	AbE28227 Human Bcl1
295	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	368	13.2	73.3	18	2	AAV11591	Aav11591 liposomal
296	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	369	13.2	73.3	20	2	AAQ86649	Aaq86649 Bcl-2 tra
297	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	370	13.2	73.3	20	2	AAV19651	Aav19651 Human bcl1
298	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	371	13.2	73.3	20	2	AAV19657	Aav19657 Human bcl1
299	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	372	13.2	73.3	20	4	AAV77808	Aav77808 Bcl-2 ant
300	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	373	13.2	73.3	20	4	AAV77809	Aav77809 Control a
301	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	374	13.2	73.3	20	5	AAI12300	Aai12300 AM-TIS su
302	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	375	13.2	73.3	20	5	AAI12301	Aai12301 Bcl-2-TIAS
303	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	376	13.2	73.3	20	5	AAI15276	Aai15276 Human Bcl1
304	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	377	13.2	73.3	20	6	ABK90270	AbK90270 Bcl-2-tar
305	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	378	13.2	73.3	20	6	ABK90264	AbK90264 Bcl-2-tar
306	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	379	13.2	73.3	20	6	ABQ78528	AbQ78528 Control a
307	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	380	13.2	73.3	20	6	ABQ78522	AbQ78522 Antisense
308	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	381	13.2	73.3	20	6	ABL54155	AbL54155 Bcl-2 ant
309	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	382	13.2	73.3	20	6	ABL54149	AbL54149 Bcl-2 ant
310	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	383	13.2	73.3	20	13	ADT93918	AdT93918 Antisense
311	14.8	82.2	20	16	ABK90359	AbK90359 Bcl-2-tar	384	13.2	73.3	20	14	ADM13830	AdM13830 Bcl-2 tra

C 385	13	72.2	20	14	ADM13836	AdM13836 Bcl-2 tta	C 458	11.6	64.4	25	8	ADB01039	ADB01039 Human MDZ
C 386	12.8	71.1	21	7	AD194767	Ad194767 MAGE-3 as	C 459	11.6	64.4	25	8	ADB01045	ADB01045 Human MDZ
C 387	12.8	71.1	22	7	AD194769	Ad194769 MAGE-3 as	C 460	11.6	64.4	25	8	ADB01046	ADB01046 Human MDZ
C 388	12.8	71.1	26	7	AD194976	Ad194976 Rat subp	C 461	11.6	64.4	25	8	ADB01044	ADB01044 Human MDZ
C 389	12.4	68.9	20	6	AB195137	Ab195137 Capture o	C 462	11.6	64.4	25	8	ADB01040	ADB01040 Human MDZ
C 390	12.4	68.9	22	6	AAE99050	AAE99050 Immunosti	C 463	11.6	64.4	27	6	ABK52432	ABK52432 Rat FGF-r
C 391	12.4	68.9	22	6	AB877691	Ab877691 Angiogene	C 464	11.6	64.4	29	6	ABK66388	ABK66388 Human gen
C 392	12.4	68.9	22	6	AB139317	Ab139317 Immunosti	C 465	11.6	64.4	29	13	ADK49378	AdK49378 PCR prime
C 393	12.4	68.9	22	9	ACD99482	AcD99482 Immunosti	C 466	11.6	64.4	30	10	ACF79315	AdF79315 Galactose
C 394	12.4	68.9	22	9	ADB36552	AdB36552 Immunosti	C 467	11.6	64.4	30	10	ACF79316	AdF79316 Galactose
C 395	12.4	68.9	22	13	ADB089491	AdB089491 Allergic	C 468	11.6	64.4	30	10	ADO48604	AdO48604 Human neu
C 396	12.4	68.9	24	6	AB186845	Ab186845 Capture o	C 469	11.6	64.4	30	14	ADX99629	AdX99629 PCR prime
C 397	12.4	68.9	24	6	AB186845	Ab186845 Capture o	C 470	11.6	64.4	30	14	ADX99629	AdX99629 PCR prime
C 398	12.2	67.8	18	12	ADH70861	AdH70861 Human Vbe	C 471	11.4	63.3	15	14	AE828210	AE828210 Human Bcl
C 399	12.2	67.8	18	12	ADH70861	AdH70861 Human Vbe	C 472	11.4	63.3	15	14	AE828207	AE828207 Human Bcl
C 400	12.2	67.8	20	6	AD039595	AD039595 Human pro	C 473	11.4	63.3	16	14	AE828201	AE828201 Human Bcl
C 401	12.2	67.8	21	2	AAV57612	AAV57612 Exon 5 of	C 474	11.4	63.3	16	14	AE828209	AE828209 Human Bcl
C 402	12.2	67.8	22	13	ADR59079	ADR59079 gammaZeIn	C 475	11.4	63.3	16	14	AE828210	AE828210 Human Bcl
C 403	12.2	67.8	30	6	ABN86425	ABn86425 Synthetic	C 476	11.4	63.3	16	14	AE828205	AE828205 Human Bcl
C 404	12.2	66.7	12	6	ABK90357	AbK90357 Bcl-2-tar	C 477	11.4	63.3	17	2	AAQ99560	AAQ99560 Human Bcl
C 405	12	66.7	13	14	AE828222	AE828222 Human Bcl	C 478	11.4	63.3	17	2	AAQ99563	AAQ99563 Human Bcl
C 406	12	66.7	14	12	AD070401	AdO70401 Human Bcl	C 479	11.4	63.3	17	5	ADY00240	ADY00240 Human TRK
C 407	12	66.7	14	14	AE828221	AE828221 Human Bcl	C 480	11.4	63.3	17	11	ADM36048	ADM36048 Human TRK
C 408	12	66.7	14	14	AE828224	AE828224 Human Bcl	C 481	11.4	63.3	17	11	ADM36048	ADM36048 Human TRK
C 409	12	66.7	15	6	AA144701	AA144701 Human bcl	C 482	11.4	63.3	17	11	ADM36048	ADM36048 Human TRK
C 410	12	66.7	15	14	AE828220	AE828220 Human Bcl	C 483	11.4	63.3	20	2	AAQ47533	AAQ47533 Go protei
C 411	12	66.7	16	14	AE828234	AE828234 Human Bcl	C 484	11.4	63.3	20	6	AB196729	AB196729 Capture o
C 412	12	66.7	16	14	AE828197	AE828197 Human Bcl	C 485	11.4	63.3	20	6	AB193737	AB193737 Capture o
C 413	12	66.7	16	14	AE828199	AE828199 Human Bcl	C 486	11.4	63.3	21	2	AAV02120	AAV02120 Human ste
C 414	12	66.7	16	14	AE828236	AE828236 Human Bcl	C 487	11.4	63.3	21	2	AAV02110	AAV02110 Human ste
C 415	12	66.7	17	14	AE828231	AE828231 Human Bcl	C 488	11.4	63.3	21	8	ABX79283	ABX79283 Ant1-Huma
C 416	12	66.7	17	14	AE828228	AE828228 Human Bcl	C 489	11.4	63.3	21	14	AEA01202	AEA01202 Human ste
C 417	12	66.7	19	13	ADR05070	AdR05070 PCR prime	C 490	11.4	63.3	22	2	AAQ07295	AAQ07295 Mouse tel
C 418	12	66.7	20	10	ADF88441	AdF88441 Single nu	C 491	11.4	63.3	22	6	AB184045	AB184045 Capture o
C 419	12	66.7	26	2	ABK10948	AbK10948 PCR prime	C 492	11.4	63.3	24	6	AB190029	AB190029 Capture o
C 420	12	66.7	26	8	AB221903	Ab221903 H. viresc	C 493	11.4	63.3	24	6	AB190028	AB190028 Capture o
C 421	12	66.7	26	8	AB221836	Ab221836 Resistant	C 494	11.4	63.3	24	6	AB184044	AB184044 Capture o
C 422	12	66.7	27	2	AAK33516	AAK33516 BCL2-targ	C 495	11.4	63.3	25	9	ACH57535	ACH57535 DNA targ
C 423	12	66.7	27	11	ADM41182	AdM41182 Human ant	C 496	11.4	63.3	25	13	AD217302	AD217302 SNP speci
C 424	12	66.7	29	8	AB221891	Ab221891 H. viresc	C 497	11.4	63.3	27	4	AAH40835	AAH40835 WNV minus
C 425	12	66.7	30	12	AD070415	AdO70415 Human Bcl	C 498	11.2	62.2	17	6	ACN14522	ACN14522 WNV Inozy
C 426	11.8	65.6	16	7	AD194771	Ad194771 MAGE-3 as	C 499	11.2	62.2	17	6	ACN02847	ACN02847 WNV Inozy
C 427	11.8	65.6	17	5	ADV00504	AdV00504 Human TER	C 500	11.2	62.2	19	13	ACN02848	ACN02848 WNV Inozy
C 428	11.8	65.6	18	14	AE828242	AE828242 Human Bcl	C 501	11.2	62.2	19	13	ADR79629	ADR79629 Human apo
C 429	11.8	65.6	20	3	AAZ36123	AAZ36123 Primer de	C 502	11.2	62.2	19	13	ADR76685	ADR76685 Human apo
C 430	11.8	65.6	20	14	ADZ03929	AdZ03929 Methylati	C 503	11.2	62.2	19	13	ADT81128	ADT81128 Human apo
C 431	11.8	65.6	20	14	ADZ03933	AdZ03933 Estrogen	C 504	11.2	62.2	19	13	ADT81128	ADT81128 Human apo
C 432	11.8	65.6	22	8	AB258562	AB258562 Forward P	C 505	11.2	62.2	20	2	AAI42646	AAI42646 Human apo
C 433	11.8	65.6	22	14	AE84492	AE84492 PAR1 prob	C 506	11.2	62.2	20	6	ABN86431	ABN86431 Human apo
C 434	11.8	65.6	24	13	ACI96297	ACI96297 Human mic	C 507	11.2	62.2	20	8	ABT23146	ABT23146 Human apo
C 435	11.8	65.6	25	9	ACI43430	ACI43430 Human mic	C 508	11.2	62.2	20	10	ABZ85412	ABZ85412 Human apo
C 436	11.8	65.6	25	9	AAFI6753	AAFI6753 E.coli ac	C 509	11.2	62.2	20	11	ABZ21642	ABZ21642 Human apo
C 437	11.8	65.6	26	5	AAZ32125	AAZ32125 Chlamydom	C 510	11.2	62.2	20	11	ADX84974	ADX84974 Human apo
C 438	11.8	65.6	27	3	AAZ45281	AAZ45281 PCR prime	C 511	11.2	62.2	20	13	ADX82186	ADX82186 Human apo
C 439	11.8	65.6	27	4	ABA02865	ABa02865 Chlamydom	C 512	11.2	62.2	20	14	ADX82186	ADX82186 Human apo
C 440	11.8	65.6	27	4	ABL41616	ABl41616 Nucleotid	C 513	11.2	62.2	20	14	ADZ62816	ADZ62816 Human apo
C 441	11.8	65.6	27	4	ABL41616	ABl41616 Nucleotid	C 514	11.2	62.2	21	2	AAZ26816	AAZ26816 Human apo
C 442	11.8	65.6	30	5	AAFI6749	AAFI6749 E.coli ac	C 515	11.2	62.2	21	10	ADD71252	ADD71252 Human apo
C 443	11.8	65.6	30	5	AAFI6749	AAFI6749 E.coli ac	C 516	11.2	62.2	21	12	ADD71255	ADD71255 Human apo
C 444	11.6	64.4	18	2	AAK33515	AAK33515 BCL2-targ	C 517	11.2	62.2	21	14	ADZ72704	ADZ72704 Human apo
C 445	11.6	64.4	18	2	AAK33513	AAK33513 Antisense	C 518	11.2	62.2	22	8	ABX12076	ABX12076 Human apo
C 446	11.6	64.4	18	11	ADM41181	AdM41181 Human ant	C 519	11.2	62.2	22	14	AE879617	AE879617 Rat tno-m
C 447	11.6	64.4	18	12	ADQ26942	ADQ26942 Human Bcl	C 520	11.2	62.2	22	14	AE879617	AE879617 Rat tno-m
C 448	11.6	64.4	20	10	ABZ87711	ABz87711 Human o11	C 521	11.2	62.2	23	14	ADU770168	ADU770168 Human apo
C 449	11.6	64.4	20	11	ABD23941	ABd23941 Human cal	C 522	11.2	62.2	23	14	ADU770168	ADU770168 Human apo
C 450	11.6	64.4	20	12	ADM14264	AdM14264 Human mpc	C 523	11.2	62.2	24	2	AAQ91913	AAQ91913 Human apo
C 451	11.6	64.4	20	12	ADM14368	AdM14368 Human mpc	C 524	11.2	62.2	24	2	AAQ91913	AAQ91913 Human apo
C 452	11.6	64.4	20	12	ADM14836	AdM14836 Human mpc	C 525	11.2	62.2	24	2	AAQ91913	AAQ91913 Human apo
C 453	11.6	64.4	21	6	ABL61249	ABl61249 Equine Ig	C 526	11.2	62.2	24	2	AAQ91913	AAQ91913 Human apo
C 454	11.6	64.4	25	2	AAV36592	AAV36592 Nucleotid	C 527	11.2	62.2	24	6	ABQ03298	ABQ03298 Human apo
C 455	11.6	64.4	25	8	ADB01043	ADB01043 Human MDZ	C 528	11.2	62.2	24	6	AB187286	AB187286 Human apo
C 456	11.6	64.4	25	8	ADB01041	ADB01041 Human MDZ	C 529	11.2	62.2	24	6	AB187094	AB187094 Human apo
C 457	11.6	64.4	25	8	ADB01042	ADB01042 Human MDZ	C 530	11.2	62.2	24	6	AB187287	AB187287 Human apo

C 531	11.2	62.2	24	6	AB187095	Ab187095 Capture O	604	11	61.1	17	6	AB139322	Ab139322 Immunost
532	11.2	62.2	24	12	ADH35264	AdH35264 Primer of	C 605	11	61.1	17	8	AB261532	Ab261532 Human H-R
533	11.2	62.2	24	12	ADJ76490	AdJ76490 IGFBP3 re	C 606	11	61.1	17	8	AB261873	Ab261873 Human H-R
534	11.2	62.2	24	12	ADO43213	AdO43213 Murine IL	C 607	11	61.1	17	8	AB261533	Ab261533 Human H-R
C 535	11.2	62.2	25	7	AD193150	Ad193150 Rat CYP 4	C 608	11	61.1	17	8	AB261874	Ab261874 Human H-R
C 536	11.2	62.2	25	9	AC197973	Ac197973 Human m1c	C 609	11	61.1	17	9	ACD99715	ACD99715 Immunost
C 537	11.2	62.2	25	9	AC118018	Ac118018 Human m1c	C 610	11	61.1	17	9	ADB36788	ADb36788 Immunost
C 538	11.2	62.2	25	9	AC128254	Ac128254 Human m1c	C 611	11	61.1	17	13	ADU89731	AdU89731 Allergic
C 539	11.2	62.2	25	9	ACK30843	AcK30843 Human m1c	C 612	11	61.1	17	14	ADZ30606	AdZ30606 Human H-R
C 540	11.2	62.2	25	9	ACK31071	AcK31071 Human m1c	C 613	11	61.1	17	14	ADZ30948	AdZ30948 Human H-R
C 541	11.2	62.2	25	9	ACH60575	AcH60575 DNA targ	C 614	11	61.1	17	14	ADZ30947	AdZ30947 Human H-R
C 542	11.2	62.2	25	13	ADR57826	AdR57826 Drug ther	C 615	11	61.1	18	14	ADZ30607	AdZ30607 Human H-R
C 543	11.2	62.2	25	13	ADR57827	AdR57827 Drug ther	C 616	11	61.1	18	2	AAV73961	AAv73961 Dengue v1
C 544	11.2	62.2	25	13	ADR57823	AdR57823 Drug ther	C 617	11	61.1	18	3	AAV73961	AAv73961 Dengue v1
C 545	11.2	62.2	25	13	ADR57825	AdR57825 Drug ther	C 618	11	61.1	19	10	ADP93337	ADp93337 Human TER
C 546	11.2	62.2	25	13	ADR57824	AdR57824 Drug ther	C 619	11	61.1	19	10	ADP93591	ADp93591 Human TER
C 547	11.2	62.2	26	4	AAH27036	AaH27036 Interleuk	C 620	11	61.1	19	12	ADP16522	ADp16522 4 synthe
C 548	11.2	62.2	26	13	AD216892	Ad216892 Mutagenic	C 621	11	61.1	19	14	ABE15594	ABe15594 Human tel
C 549	11.2	62.2	26	13	AD216895	Ad216895 Mutagenic	C 622	11	61.1	19	14	ABE15817	ABe15817 Human tel
C 550	11.2	62.2	26	13	AD216900	Ad216900 Mutagenic	C 623	11	61.1	20	6	ABK43294	ABk43294 Human GNK
C 551	11.2	62.2	30	3	AAZ88884	AaZ88884 Human wol	C 624	11	61.1	20	6	AB193880	ABi93880 Capture o
C 552	11.2	62.2	30	9	ACC84072	AcC84072 Chicken o	C 625	11	61.1	20	13	ADU78752	AdU78752 Antisense
C 553	11.2	62.2	30	14	ADW44301	AdW44301 Chicken o	C 626	11	61.1	20	13	ADU78813	AdU78813 Antisense
C 554	11.2	62.2	30	14	AEA00935	AeA00935 PCR prime	C 627	11	61.1	20	13	ADU78750	AdU78750 Antisense
C 555	11.2	62.2	30	14	ABE76888	AbE76888 Chicken o	C 628	11	61.1	20	13	ADU78751	AdU78751 Antisense
C 556	11.2	62.2	30	14	ABK90356	AbK90356 Bcl-2-tar	C 629	11	61.1	21	4	AAE98982	AAe98982 Immunost
C 557	11.2	62.2	30	14	ABV63578	AbV63578 Human ekt	C 630	11	61.1	21	6	ABF77623	ABf77623 Angiogen
C 558	11.2	62.2	30	14	ABV70939	AbV70939 Human sht	C 631	11	61.1	21	6	AB139330	ABi139330 Immunost
C 559	11.2	62.2	30	14	AAV25556	AaV25556 Unmethyla	C 632	11	61.1	21	9	ACD99414	ACd99414 Immunost
C 560	11.2	62.2	30	14	AAV27730	AAv27730 Immunost	C 633	11	61.1	21	9	ADB36484	ADb36484 Immunost
C 561	11.2	62.2	30	14	AAZ41915	AaZ41915 IL-12 sec	C 634	11	61.1	21	13	ADU89423	ADu89423 Allergic
C 562	11.2	62.2	30	14	AAZ60983	AaZ60983 Nucleotid	C 635	11	61.1	21	14	ADV66183	ADv66183 Human Bcl
C 563	11.2	62.2	30	14	AAZ47991	AaZ47991 Immune re	C 636	11	61.1	24	6	AB184331	ABi184331 Capture o
C 564	11.2	62.2	30	14	AAZ47858	AaZ47858 Immunost	C 637	11	61.1	24	6	AB184330	ABi184330 Capture o
C 565	11.2	62.2	30	14	AAZ47652	AaZ47652 Paracellul	C 638	11	61.1	25	2	AAV30647	AAv30647 Telomera
C 566	11.2	62.2	30	14	AAH50637	AaH50637 Natural k	C 639	11	61.1	27	13	ADQ96671	ADq96671 Dengue v1
C 567	11.2	62.2	30	14	AAE98797	AAe98797 CPG immu	C 640	11	61.1	28	2	AAV73971	AAv73971 Dengue v1
C 568	11.2	62.2	30	14	AAE98946	AAe98946 Immunost	C 641	11	61.1	28	2	AAV73965	AAv73965 Dengue v1
C 569	11.2	62.2	30	14	ABF77587	ABf77587 Angiogen	C 642	11	61.1	30	2	AAZ08160	AAz08160 HTRT begu
C 570	11.2	62.2	30	14	AB139058	ABi139058 Immunost	C 643	11	61.1	30	6	AAE18779	AAe18779 PCR prime
C 571	11.2	62.2	30	14	AA139198	Aa139198 Murine To	C 644	11	61.1	30	6	ADV00505	ADv00505 Human TER
C 572	11.2	62.2	30	14	ABF70574	ABf70574 Dendritic	C 645	11	61.1	17	6	ACN01033	ACn01033 WNV Hamme
C 573	11.2	62.2	30	14	ABX98600	ABx98600 Cancer me	C 646	11	61.1	17	6	ACN10371	ACn10371 WNV, min
C 574	11.2	62.2	30	14	ACA92716	AcA92716 Immunost	C 647	11	61.1	17	6	ACN06760	ACn06760 WNV, Ambec
C 575	11.2	62.2	30	14	ACD99379	ACd99379 Immunost	C 648	11	61.1	17	6	ACN10372	ACn10372 WNV, min
C 576	11.2	62.2	30	14	ADB36448	ADb36448 Immunost	C 649	11	61.1	17	8	ACD63378	ACd63378 HCV minus
C 577	11.2	62.2	30	14	ADG60224	ADg60224 Oligonuc	C 650	11	61.1	17	8	ACD59292	ACd59292 HCV DN
C 578	11.2	62.2	30	14	ADG68169	ADg68169 Unmethyla	C 651	11	61.1	17	8	ACD59291	ACd59291 HCV DN
C 579	11.2	62.2	30	14	ACF36781	AcF36781 Immunost	C 652	11	61.1	17	8	ACG63378	ACg63378 HCV minus
C 580	11.2	62.2	30	14	ABX76048	ABx76048 Immunost	C 653	11	61.1	17	8	ACG63900	ACg63900 Murine cl
C 581	11.2	62.2	30	14	ACA58713	AcA58713 Gaectric u	C 654	11	61.1	17	12	AD186048	ADi186048 HCV DN
C 582	11.2	62.2	30	14	AD101109	Ad101109 Immunost	C 655	11	61.1	17	12	AD186049	ADi186049 HCV DN
C 583	11.2	62.2	30	14	ADM99078	AdM99078 Immunost	C 656	11	61.1	17	12	AD184016	ADi184016 HCV DN
C 584	11.2	62.2	30	14	ADDO4796	ADdO4796 CPG oligo	C 657	11	61.1	18	6	ABN81526	ABn81526 Naegleria
C 585	11.2	62.2	30	14	ADDO07480	ADdO07480 Immunost	C 658	11	61.1	18	9	AAE56494	AAe56494 Ephi7 cdn
C 586	11.2	62.2	30	14	ADT04180	ADt04180 Novel imm	C 659	11	61.1	19	2	AAV15123	AAv15123 Synthetic
C 587	11.2	62.2	30	14	ADU89387	ADu89387 Allergic	C 660	11	61.1	19	2	AAV70262	AAv70262 Human HNG
C 588	11.2	62.2	30	14	ADZ88555	ADz88555 CPG immu	C 661	11	61.1	19	14	ABE50719	ABe50719 Human ADA
C 589	11.2	62.2	30	14	ABE16661	ABe16661 CPG immu	C 662	11	61.1	19	14	ABE50915	ABe50915 Human ADA
C 590	11.2	62.2	30	14	ABE16258	ABe16258 NK lytic	C 663	11	61.1	20	2	AAV70261	AAv70261 Human HNG
C 591	11.2	62.2	30	14	ABE28225	ABe28225 Human Bcl	C 664	11	61.1	20	4	AAE81218	AAe81218 Human Bcl
C 592	11.2	62.2	30	14	AD070424	ADo70424 Human Bcl	C 665	11	61.1	20	6	ABE81731	ABe81731 PCR prime
C 593	11.2	62.2	30	14	AAV73963	AAv73963 Dengue v1	C 666	11	61.1	20	6	ABE66703	ABe66703 Human m1l
C 594	11.2	62.2	30	14	AAV73962	AAv73962 Dengue v1	C 667	11	61.1	20	6	AAE43007	AAe43007 Human PLA
C 595	11.2	62.2	30	14	ADU94511	ADu94511 Human TER	C 668	11	61.1	20	6	AAI40246	AAi40246 Isoprenol
C 596	11.2	62.2	30	14	ADU94512	ADu94512 Human TER	C 669	11	61.1	20	6	ABE68908	ABe68908 Human Rec
C 597	11.2	62.2	30	14	ABE28237	ABe28237 Human Bcl	C 670	11	61.1	20	9	AAI62688	AAi62688 Human CD3
C 598	11.2	62.2	30	14	AAV19661	AAv19661 Human bcl	C 671	11	61.1	20	9	ABZ89811	ABz89811 Human oli
C 599	11.2	62.2	30	14	ABA80024	ABa80024 HBA2 muta	C 672	11	61.1	20	10	ABD62641	ABd62641 A1369870-
C 600	11.2	62.2	30	14	ABA80025	ABa80025 HBA2 muta	C 673	11	61.1	20	11	ADP43520	ADp43520 Human MAD
C 601	11.2	62.2	30	14	AAE92826	AAe92826 Immunost	C 674	11	61.1	20	12	ADP43598	ADp43598 Human MAD
C 602	11.2	62.2	30	14	ADU92535	ADu92535 Human TER	C 675	11	61.1	20	12	ADU78724	ADu78724 Antisense
C 603	11.2	62.2	30	14	ABE77931	ABe77931 Angiogene	C 676	11	61.1	20	13		

677	10.8	60.0	20	13	ADU78725	AdU78725 Antisense	750	10.6	58.9	20	10	ABZ92530	AbZ92530 Human OLI
678	10.8	60.0	20	13	ADU78723	AdU78723 Antisense	751	10.6	58.9	20	11	ABD28760	ABD28760 R44202-de
679	10.8	60.0	20	14	AEC22800	Aec22800 Human myo	752	10.6	58.9	20	11	ABD27632	ABD27632 A448400-
680	10.8	60.0	21	2	AA751301	Aa751301 Human AD4	753	10.6	58.9	20	12	ADH43000	ADH43000 Measles v
681	10.8	60.0	21	2	AAV70260	AaV70260 Human HMG	754	10.6	58.9	20	12	ADH43032	ADH43032 Measles v
682	10.8	60.0	21	12	ADP27845	AdP27845 PCR prime	755	10.6	58.9	20	12	ADJ22915	ADJ22915 Human end
683	10.8	60.0	21	13	ADRO0300	AdRO0300 MTA1 prob	756	10.6	58.9	20	12	ADJ23603	ADJ23603 Human end
684	10.8	60.0	21	13	ADRI5391	AdRI5391 Human gen	757	10.6	58.9	20	12	ADJ24198	ADJ24198 Human end
685	10.8	60.0	21	13	ADU41858	AdU41858 Knock-dow	758	10.6	58.9	20	12	ADK721750	ADK721750 Human end
686	10.8	60.0	21	13	ADU46018	AdU46018 Knock-dow	759	10.6	58.9	20	12	ADK76540	ADK76540 Chimeric
687	10.8	60.0	21	14	ADM26420	AdM26420 EGFR inh	760	10.6	58.9	20	12	ADK78532	ADK78532 Chimeric
688	10.8	60.0	22	12	ADK94593	AdK94593 Primer of	761	10.6	58.9	20	12	ADK79657	ADK79657 Chimeric
689	10.8	60.0	22	12	AD193582	AdI93582 Human 2B6	762	10.6	58.9	20	12	ADK79260	ADK79260 Chimeric
690	10.8	60.0	24	2	AAK35045	AaK35045 Oligonuc	763	10.6	58.9	20	12	ADM14677	ADM14677 Human mPG
691	10.8	60.0	24	2	AAK35044	AaK35044 Oligonuc	764	10.6	58.9	20	12	ADM14224	ADM14224 Human mPG
692	10.8	60.0	24	5	AA254540	Aa254540 Oligonuc	765	10.6	58.9	20	12	ADNA48566	ADNA48566 Human Not
693	10.8	60.0	24	6	ABK96225	AbK96225 Respirato	766	10.6	58.9	20	12	ADN48643	ADN48643 Human Not
694	10.8	60.0	24	6	AB183397	AbI83397 Capture o	767	10.6	58.9	21	2	AAQ76302	AaQ76302 Staphyloc
695	10.8	60.0	24	6	AB187462	AbI87462 Capture o	768	10.6	58.9	21	2	AA703485	Aa703485 P53 exon
696	10.8	60.0	24	6	AB183396	AbI83396 Capture o	769	10.6	58.9	21	2	AA701669	Aa701669 Peptide n
697	10.8	60.0	24	6	AB187463	AbI87463 Capture o	770	10.6	58.9	21	2	AAK17920	AaK17920 Anti-CWV
698	10.8	60.0	24	14	ABR45398	AeB45398 RSV compl	771	10.6	58.9	21	6	ABK70333	ABK70333 Synthetic
699	10.8	60.0	25	2	AAQ40345	AaQ40345 Sequence	772	10.6	58.9	21	6	ABS97190	ABS97190 Human CYP
700	10.8	60.0	25	2	AAQ93010	AaQ93010 Pre-Invas	773	10.6	58.9	21	8	ABD50750	ABD50750 DNA fragm
701	10.8	60.0	25	5	AA84051	Aa84051 5' and 3'	774	10.6	58.9	21	12	ADL66994	ADL66994 Accuprime
702	10.8	60.0	25	8	ACC70842	AcC70842 Human G-P	775	10.6	58.9	21	12	ADQ080810	ADQ08097 FLJ11856
703	10.8	60.0	25	9	AC117621	AcI17621 Human m1c	776	10.6	58.9	21	14	ACL47994	ACL47994 FLJ11856
704	10.8	60.0	25	9	ACK06164	AcK06164 Human m1c	777	10.6	58.9	21	14	ACL48099	ACL48099 FLJ11856
705	10.8	60.0	25	9	AC102131	AcI02131 Human m1c	778	10.6	58.9	21	14	ACL47992	ACL47992 FLJ11856
706	10.8	60.0	25	9	AC184302	AcI84302 Human m1c	779	10.6	58.9	21	14	AD41012	AD41012 Mouse P13
707	10.8	60.0	25	9	AC131020	AcI31020 Human m1c	780	10.6	58.9	22	6	ADP27688	ADP27688 PCR prime
708	10.8	60.0	25	9	ACT54913	AcI54913 Human m1c	781	10.6	58.9	23	12	ADM26320	ADM26320 EGFR inh
709	10.8	60.0	25	12	ADP86267	AdP86267 PCR prime	782	10.6	58.9	23	14	ADM26320	ADM26320 EGFR inh
710	10.8	60.0	25	13	ADU05141	AdU05141 Novel m1c	783	10.6	58.9	24	2	AAK22426	AaK22426 Human ery
711	10.8	60.0	25	13	ADU05134	AdU05134 Novel m1c	784	10.6	58.9	24	6	AA138074	AA138074 Bukaryoc1
712	10.8	60.0	26	2	AAQ86577	AaQ86577 Alpha-amy	785	10.6	58.9	24	6	ABQ10480	ABQ10480 Oligonuc
713	10.8	60.0	26	2	AAV19246	AaV19246 Primer G4	786	10.6	58.9	24	6	ABQ10439	ABQ10439 Oligonuc
714	10.8	60.0	26	3	AAA96558	Aa96558 Forward P	787	10.6	58.9	24	6	ABQ03837	ABQ03837 Oligonuc
715	10.8	60.0	26	3	AAA72658	Aa72658 PCR prime	788	10.6	58.9	24	6	ABQ00076	ABQ00076 Oligonuc
716	10.8	60.0	26	3	AAA73960	Aa73960 Internal	789	10.6	58.9	24	6	ABQ04193	ABQ04193 Oligonuc
717	10.8	60.0	26	4	AAH46472	AaH46472 Forward P	790	10.6	58.9	24	6	ABAO4193	ABAO4193 Oligonuc
718	10.8	60.0	26	7	AD194980	AdI94980 Human LIP	791	10.6	58.9	24	6	ABAO5958	ABAO5958 Human cyt
719	10.8	60.0	26	8	AA151638	AaI51638 Mutant hu	792	10.6	58.9	24	6	ABX09478	ABX09478 Arteriosc
720	10.8	60.0	26	13	AD173117	AdI17317 Mutagenic	793	10.6	58.9	24	10	ADP50366	ADP50366 Mouse MAP
721	10.8	60.0	27	4	AA181830	AaI18380 Forward P	794	10.6	58.9	24	14	ACC57642	ACC57642 Mouse MAP
722	10.8	60.0	27	6	AB160790	AbI60790 FIV-Oma 9	795	10.6	58.9	24	14	ABE71524	ABE71524 E. coli t
723	10.8	60.0	28	3	AA57836	Aa57836 Primer us	796	10.6	58.9	25	2	AAK19114	AaK19114 PCR prime
724	10.8	60.0	29	2	AAQ73551	AaQ73551 PCR prime	797	10.6	58.9	25	3	AAA38419	AAA38419 Pseudomon
725	10.8	60.0	29	6	ABV73071	AbV73071 D. radiod	798	10.6	58.9	25	6	ABQ12016	ABQ12016 Oligonuc
726	10.8	60.0	29	8	AA151629	AaI51629 Human TBR	799	10.6	58.9	25	8	ABQ11975	ABQ11975 Oligonuc
727	10.8	60.0	29	10	ADP88635	AdP88635 Human ret	800	10.6	58.9	25	8	ABD01038	ABD01038 Human MD2
728	10.8	60.0	30	12	AD056878	Ad056878 Human CBR	801	10.6	58.9	25	8	ADB01047	ADB01047 Human m1c
729	10.8	60.0	30	13	AD511886	Ad511886 Peptide c	802	10.6	58.9	25	9	AC130128	AC130128 Human m1c
730	10.6	58.9	17	8	ACN12647	Acn12647 WNV minus	803	10.6	58.9	25	9	AC156613	AC156613 Human m1c
731	10.6	58.9	17	8	ADA99539	Ada99539 Human MDZ	804	10.6	58.9	25	9	ACK07747	ACK07747 Human m1c
732	10.6	58.9	17	8	ADA99538	Ada99538 Human MDZ	805	10.6	58.9	25	9	ACK07746	ACK07746 Human m1c
733	10.6	58.9	17	8	ACD62135	AcD62135 HCV minus	806	10.6	58.9	25	12	ADP17639	ADP17639 Renal cel
734	10.6	58.9	17	11	AD148125	AdI148125 Human 1KK	807	10.6	58.9	25	12	ADP15897	ADP15897 Renal cel
735	10.6	58.9	17	12	AD185421	AdI185421 HCV DNAY	808	10.6	58.9	25	13	ADR56197	ADR56197 Drug thier
736	10.6	58.9	18	2	AAK32262	AaK32262 Probe for	809	10.6	58.9	25	13	AD575850	AD575850 Transge11
737	10.6	58.9	18	2	ADA45502	Ada45502 Human p53	810	10.6	58.9	25	13	AAQ97557	AAQ97557 5' primer
738	10.6	58.9	18	10	ABK34430	AbK34430 PCR prime	811	10.6	58.9	26	5	AAQ17382	AaQ17382 Informati
739	10.6	58.9	19	6	AB182371	AbI82371 p53 mutat	812	10.6	58.9	26	6	AD45399	AD45399 Human MTH
740	10.6	58.9	19	6	AB182372	AbI82372 p53 mutat	813	10.6	58.9	26	6	AD45399	AD45399 Human MTH
741	10.6	58.9	20	2	AA12003	AaI2003 CMV antls	814	10.6	58.9	26	10	ADH61029	ADH61029 Human mls
742	10.6	58.9	20	2	AAV23539	AaV23539 Mouse bet	815	10.6	58.9	26	13	ADT55162	ADT55162 PCR prime
743	10.6	58.9	20	2	AAV40341	AaV40341 Maize oli	816	10.6	58.9	26	13	ADZ15617	ADZ15617 Mutagenic
744	10.6	58.9	20	6	AB145404	AbI45404 Human chr	817	10.6	58.9	26	13	ADZ15620	ADZ15620 Mutagenic
745	10.6	58.9	20	6	ABV72995	AbV72995 K-ras gen	818	10.6	58.9	26	13	ADZ16195	ADZ16195 Mutagenic
746	10.6	58.9	20	8	ADA44782	Ada44782 Antisense	819	10.6	58.9	26	13	ADZ16195	ADZ16195 Mutagenic
747	10.6	58.9	20	8	ADA55500	Ada55500 Human FGF	820	10.6	58.9	26	13	ADZ15609	ADZ15609 Mutagenic
748	10.6	58.9	20	10	ACC46786	AcC46786 Human COP	821	10.6	58.9	26	13	ADZ15609	ADZ15609 Mutagenic
749	10.6	58.9	20	10	ABZ91402	AbZ91402 Human OLI	822	10.6	58.9	26	13	ADZ16180	ADZ16180 Mutagenic

823	10.6	58.9	26	13	ADZ16190	Adz16190 Mutagenic	C 896	10.4	57.8	20	4	AAC92834	Aac92834 Human P13
824	10.6	58.9	26	13	ADZ16186	Adz16186 Mutagenic	C 897	10.4	57.8	20	4	AAC67105	Aac67105 Human pr
C 825	10.6	58.9	27	4	AAD15304	Aad15304 Human PMS	C 898	10.4	57.8	20	5	AAC92524	Aac92524 5' PCR pr
826	10.6	58.9	28	2	AAOG61792	Aaog61792 Sequence	C 899	10.4	57.8	20	6	ABLS1214	Ab151214 Thermoctol
827	10.6	58.9	28	2	AAAT45259	Aaat45259 Pemphigus	C 900	10.4	57.8	20	6	AB194133	Ab194133 Capture o
828	10.6	58.9	28	2	AAAT66431	Aaat66431 Primer #1	C 901	10.4	57.8	20	6	AB1941781	Ab1941781 Capture o
829	10.6	58.9	28	2	AAAT59636	Aaat59636 Human pro	C 902	10.4	57.8	20	6	AB193598	Ab193598 Capture o
C 830	10.6	58.9	28	10	AAFC03441	Aafc03441 Human Dsg	C 903	10.4	57.8	20	6	AB193878	Ab193878 Capture o
C 831	10.6	58.9	29	3	AAA12681	Aaa12681 Primer CC	C 904	10.4	57.8	20	6	AB195307	Ab195307 Capture o
C 832	10.6	58.9	29	6	AAAD28193	Aaad28193 Oligonuc1	C 905	10.4	57.8	20	6	ABN80341	Abn80341 PCR prime
C 833	10.6	58.9	29	6	AA143441	Aa143441 Infectiou	C 906	10.4	57.8	20	10	ABZ84943	Abz84943 Human o11
C 834	10.6	58.9	29	8	ABZ79684	Abz79684 NP3 Promo	C 907	10.4	57.8	20	11	ABD21173	Abd21173 Human tra
C 835	10.6	58.9	29	8	ABZ79645	Abz79645 Promoter	C 908	10.4	57.8	20	12	ADJ86603	Adj86603 Nucleic a
C 836	10.6	58.9	30	4	AAAH76358	Aaah76358 Human PMS	C 909	10.4	57.8	20	12	ADJ53417	Adj53417 Human G p
C 837	10.6	58.9	30	5	AAAH75035	Aaah75035 PCR prime	C 910	10.4	57.8	20	12	ADP26885	Adp26885 Human Epn
C 838	10.6	58.9	30	6	ABK49673	Abk49673 Human int	C 911	10.4	57.8	20	12	ADP26835	Adp26835 Human Epn
C 839	10.6	58.9	30	6	ABX12948	Abx12948 Human PMS	C 912	10.4	57.8	20	12	ADP19919	Adp19919 Human ABC
C 840	10.6	58.9	30	9	ADA06261	Ada06261 Human MMR	C 913	10.4	57.8	20	12	ADP19990	Adp19990 Human ABC
C 841	10.6	58.9	30	10	ADC89645	Adc89645 Human PMS	C 914	10.4	57.8	20	12	AD085577	Ad085577 Human zin
C 842	10.6	58.9	30	12	ADN00901	Adn00901 Human Pac	C 915	10.4	57.8	20	12	AD085577	Ad085577 Human zin
C 843	10.6	58.9	30	13	ADS31659	Ads31659 Gene expr	C 916	10.4	57.8	20	14	ADY53579	Ady53579 Antisense
C 844	10.6	58.9	30	13	ADS31654	Ads31654 Gene expr	C 917	10.4	57.8	20	14	AAV63573	Aav63573 Reverse p
C 845	10.6	58.9	30	13	ADT08570	Adt08570 Human GAD	C 918	10.4	57.8	21	6	ABK33200	Abk33200 Human vas
C 846	10.6	58.9	30	14	ADY00837	Ady00837 PCR prime	C 919	10.4	57.8	21	7	AD194819	Ad194819 Human onc
C 847	10.4	57.8	13	14	ABE28216	Ab28216 Human Bcl	C 920	10.4	57.8	21	8	ABX11044	Abx11044 RT-PCR pr
C 848	10.4	57.8	14	14	ABE28215	Ab28215 Human Bcl	C 921	10.4	57.8	21	8	ACA62514	Aca62514 Human pho
C 849	10.4	57.8	14	14	ABE28218	Ab28218 Human Bcl	C 922	10.4	57.8	21	8	ACG7467	Acg7467 PDE-2 cDN
C 850	10.4	57.8	15	4	AAST7223	Aast7223 Human CHR	C 923	10.4	57.8	21	10	ADH53400	Adh53400 Human VEG
C 851	10.4	57.8	15	6	AAAD5054	Aaad5054 ASO prime	C 924	10.4	57.8	21	10	ACC48594	Acc48594 Human pho
C 852	10.4	57.8	15	6	ABKS4325	Abks4325 Human SCV	C 925	10.4	57.8	21	10	ABX95239	Abx95239 Human pho
C 853	10.4	57.8	15	14	ABE28214	Ab28214 Human Bcl	C 926	10.4	57.8	21	13	ADU29296	Adu29296 Knock-dow
C 854	10.4	57.8	16	14	ABE28202	Ab28202 Human Bcl	C 927	10.4	57.8	21	14	ADY86497	Ady86497 Human VEG
C 855	10.4	57.8	16	14	ABE28207	Ab28207 Human Bcl	C 928	10.4	57.8	22	6	ABQ87713	Abq87713 Human ESR
C 856	10.4	57.8	16	14	ABE28203	Ab28203 Human Bcl	C 929	10.4	57.8	22	6	ABQ73926	Abq73926 Leucine z
C 857	10.4	57.8	17	2	AAAI0231	Aaai0231 Human bia	C 930	10.4	57.8	22	6	ABX33749	Abx33749 PCR prime
C 858	10.4	57.8	17	3	AAAX32757	Aaax32757 Human DCR	C 931	10.4	57.8	22	9	AAI57422	Aai57422 Oligonuc1
C 859	10.4	57.8	17	3	AAAF25245	Aaaf25245 Oestrogen	C 932	10.4	57.8	22	14	ADY53684	Ady53684 Anti-gale
C 860	10.4	57.8	17	3	AAAF2547	Aaaf2547 Hammerhea	C 933	10.4	57.8	22	14	ADY53685	Ady53685 Anti-gale
C 861	10.4	57.8	17	3	AAAF2547	Aaaf2547 Hammerhea	C 934	10.4	57.8	22	14	ADY53685	Ady53685 Anti-gale
C 862	10.4	57.8	17	4	ABK01834	Abk01834 Human NOG	C 935	10.4	57.8	22	14	AAAX07487	Aax07487 Synthetic
C 863	10.4	57.8	17	4	ABK01588	Abk01588 Human NOG	C 936	10.4	57.8	23	2	AAAX07203	Aax07203 Retrovira
C 864	10.4	57.8	17	4	ABK01835	Abk01835 Human NOG	C 937	10.4	57.8	23	2	AAI65498	Aai65498 PCR prime
C 865	10.4	57.8	17	5	ADVO0433	Advo0433 Human TER	C 938	10.4	57.8	23	4	ABK55999	Abk55999 Human gen
C 866	10.4	57.8	17	5	ACDS9293	Acds9293 HCV DNAzy	C 939	10.4	57.8	23	6	AAAD65052	Aaad65052 Corynebac
C 867	10.4	57.8	17	8	ACD63377	Ac63377 HCV minus	C 940	10.4	57.8	23	10	ADL14895	Adl14895 C. glutam
C 868	10.4	57.8	17	8	ACCG4759	Accg4759 Murtine o1	C 941	10.4	57.8	24	6	AB183766	Ab183766 Capture o
C 869	10.4	57.8	17	12	ADU96192	Adu96192 RT-PCR up	C 942	10.4	57.8	24	6	AB184326	Ab184326 Capture o
C 870	10.4	57.8	17	12	AD186047	Ad186047 HCV DNAzy	C 943	10.4	57.8	24	6	AB184326	Ab184326 Capture o
C 871	10.4	57.8	17	12	AD184017	Ad184017 HCV DNAzy	C 944	10.4	57.8	24	6	AB184327	Ab184327 Capture o
C 872	10.4	57.8	18	11	AD220606	Ad220606 Universal	C 945	10.4	57.8	24	6	AB184837	Ab184837 Capture o
C 873	10.4	57.8	18	12	ADJ65200	Adj65200 Human con	C 946	10.4	57.8	24	6	AB187184	Ab187184 Capture o
C 874	10.4	57.8	18	13	ADT93915	Adt93915 Antisense	C 947	10.4	57.8	24	6	AB184327	Ab184327 Capture o
C 875	10.4	57.8	19	5	AAAH20974	Aaah20974 Human Fan	C 948	10.4	57.8	24	6	AB186325	Ab186325 Capture o
C 876	10.4	57.8	19	10	ADF84175	Adf84175 Human bre	C 949	10.4	57.8	24	6	AB187185	Ab187185 Capture o
C 877	10.4	57.8	19	10	ADF83872	Adf83872 Human bre	C 950	10.4	57.8	24	6	AB186132	Ab186132 Capture o
C 878	10.4	57.8	19	10	ADF84135	Adf84135 Human bre	C 951	10.4	57.8	24	6	AB186324	Ab186324 Capture o
C 879	10.4	57.8	19	10	ADP83912	Adp83912 Human bre	C 952	10.4	57.8	24	6	AB183767	Ab183767 Capture o
C 880	10.4	57.8	19	10	ADG89308	Adg89308 Cancer de	C 953	10.4	57.8	24	6	AB184836	Ab184836 Capture o
C 881	10.4	57.8	19	12	ADJ37695	Adj37695 Human VEG	C 954	10.4	57.8	24	6	ACC84844	Acc84844 p55PRX pr
C 882	10.4	57.8	19	13	ADRM00331	Adrm00331 ps2 PCR f	C 955	10.4	57.8	25	2	AAAT72831	Aaat72831 IGF-1 gen
C 883	10.4	57.8	19	14	ADMA5845	Adma5845 Forward R	C 956	10.4	57.8	25	2	AAAT72824	Aaat72824 p. putida
C 884	10.4	57.8	20	2	AAOG62985	Aaog62985 Angiotens	C 957	10.4	57.8	25	3	AAAB6864	Aaab6864 Bacteriop
C 885	10.4	57.8	20	2	AAOG95360	Aaog95360 Primer B	C 958	10.4	57.8	25	3	AAZ298535	Aaz298535 IGF-1 gen
C 886	10.4	57.8	20	2	AAAT65799	Aaat65799 Primer #2	C 959	10.4	57.8	25	3	AAZ51448	Aaz51448 Human NK2
C 887	10.4	57.8	20	2	AAAT48180	Aaat48180 Primer CR	C 960	10.4	57.8	25	7	AAH78457	Aah78457 Rat mGLur
C 888	10.4	57.8	20	2	AAAT60626	Aaat60626 Human chr	C 961	10.4	57.8	25	7	AD194995	Ad194995 Human mic
C 889	10.4	57.8	20	2	AAV23968	Aav23968 Primer fo	C 962	10.4	57.8	25	9	AC151791	Ac151791 Human mic
C 890	10.4	57.8	20	2	AAV01835	Aav01835 PCR prime	C 963	10.4	57.8	25	9	AC180779	Ac180779 Human mic
C 891	10.4	57.8	20	2	AAV57175	Aav57175 Human Not	C 964	10.4	57.8	25	9	ACH64183	Ach64183 DNA large
C 892	10.4	57.8	20	2	AAV57094	Aav57094 Human Not	C 965	10.4	57.8	25	9	ACH57409	Ach57409 DNA large
C 893	10.4	57.8	20	3	AAZ60305	Aaz60305 PCR prime	C 966	10.4	57.8	25	9	ACH53803	Ach53803 DNA large
C 894	10.4	57.8	20	3	AAZ60333	Aaz60333 PCR prime	C 967	10.4	57.8	25	9	ADP16995	Adp16995 Renal cel
C 895	10.4	57.8	20	3	AAZ38435	Aaz38435 Human ang	C 968	10.4	57.8	25	12		

c	969	10.4	57.8	25	12	ADP16996	ADP16996 Renal cel
c	970	10.4	57.8	25	12	AD031079	Ad031079 Human c-f
c	971	10.4	57.8	26	13	AD215569	Ad215569 Mutagenic
c	972	10.4	57.8	26	13	AD216737	Ad216737 Mutagenic
c	973	10.4	57.8	26	13	AD215568	Ad215568 Mutagenic
c	974	10.4	57.8	27	10	AA33517	Aa33517 BCL2-cary
c	975	10.4	57.8	27	10	ACF58355	ACF58355 Plasmid p
c	976	10.4	57.8	27	11	ADM41183	Adm41183 Human ant
c	977	10.4	57.8	28	3	AAA13527	Aaa13527 Human onc
c	978	10.4	57.8	28	4	AAH74319	Aah74319 PCR prime
c	979	10.4	57.8	28	4	AAI66838	Aai66838 HSPD4A4
c	980	10.4	57.8	28	6	AAD30669	Aad30669 HSPD4A4
c	981	10.4	57.8	28	12	ADG25783	Adg25783 Mycobacte
c	982	10.4	57.8	28	12	ADG25785	Adg25785 Mycobacte
c	983	10.4	57.8	28	12	AD059368	Ad059368 Rhodobact
c	984	10.4	57.8	29	2	AAV54327	Aav54327 T-cell re
c	985	10.4	57.8	29	2	AAV55410	Aav55410 Primer to
c	986	10.4	57.8	29	5	ADV02857	Adv02857 Human BAC
c	987	10.4	57.8	29	5	ADV02835	Adv02835 Human BAC
c	988	10.4	57.8	29	6	ABN81595	Abn81595 Human FGP
c	989	10.4	57.8	29	10	ADG87085	Adg87085 Light cha
c	990	10.4	57.8	29	12	AD056439	Ad056439 Human cyc
c	991	10.4	57.8	30	4	AAF85670	Aaf85670 Human ast
c	992	10.4	57.8	30	6	AAI44990	Aai44990 CYP1A1 m2
c	993	10.4	57.8	30	12	ADJ57566	Adj57566 Human CD9
c	994	10.2	56.7	15	2	AAK64708	Aak64708 Human B7-
c	995	10.2	56.7	15	3	AACT3570	Aact3570 Reverse p
c	996	10.2	56.7	15	4	AAF48202	Aaf48202 IGFBP3 ol
c	997	10.2	56.7	17	2	AAQ23014	Aaq23014 Pro-OK pr
c	998	10.2	56.7	17	2	AAA18849	Aaa18849 Human T1B
c	999	10.2	56.7	17	2	AAV92386	Aav92386 Human A-R
c	1000	10.2	56.7	17	2	AAV72307	Aav72307 Human b1o

## ALIGNMENTS

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RESULT 1
AAQ86659 standard; DNA; 18 BP.
XX
XX AAQ86659;
AC
XX
DT 25-MAR-2003 (revised)
DT 27-SEP-1995 (first entry)
XX
XX Bcl-2 antisense oligonucleotide.
DE
XX
KW Antisense oligonucleotide; bcl-2; cancer; therapy;
KW chemoresistance; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..18
FT /*tag= a
FT /note= "3'-5' (antisense) sequence"
XX
XX MO9508350-A1.
XX
XX 30-MAR-1995.
XX
XX 20-SEP-1994; 94WO-US010725.
XX
XX 20-SEP-1993; 93US-00124256.
XX
XX (REED/) REED J C.
XX
XX Reed JC;
XX
XX WPI; 1995-139394/18.
XX
XX Anti-code oligomers which bind to bcl-2 mRNA - for the treatment of human
PT

```

```

PT solid tumours, esp. breast cancer.
XX
XX Example 18; Page 44; 108bp; English.
PS
XX Reversal of chemoresistance of tumor cells by antisense-mediated
CC reduction of bcl1-2 expression was demonstrated using the oligonucleotide
CC given in AAQ86659. This is antisense to the first 6 codons of the bcl-2
CC ORF. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match 100.0%; Score 18; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 TCTCCAGCGTGGCCAT 18
Db 1 TCTCCAGCGTGGCCAT 18
XX

```

```

RESULT 2
AAV52545 standard; DNA; 18 BP.
XX
XX AAV52545;
AC
XX
DT 20-NOV-1998 (first entry)
XX
XX Unmethylated CpG dinucleotide 1758.
DE
XX
XX Unmethylated CpG dinucleotide; immune response; bacterial meningitis;
KW natural killer cell activation; NK cell; Th2 response; neonatal sepsis;
KW pulmonary disorder; asthma; environmentally induced airway disease;
KW bacterial infection; endotoxaemia; therapy; cystic fibrosis;
KW inflammatory bowel disease; ss.
XX
OS Synthetic.
XX
XX MO9837919-A1.
XX
XX 03-SEP-1998.
XX
XX 25-FEB-1998; 98WO-US003678.
XX
XX 28-FEB-1997; 97US-0039405P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Schwartz DA, Krieg AM;
XX
XX WPI; 1998-480941/41.
XX
XX Use of nucleic acids containing an unmethylated CpG - for treating a
PT subject having or at risk of having an acute decrement in air flow or
PT inhibiting an inflammatory response.
XX
XX Example 4; Page 35; 65pp; English.
XX
XX This sequence represents an unmethylated CpG dinucleotide, and can be
CC used in the method of the invention. The method is for treating a subject
CC having, or at risk of having an acute decrement in air flow, comprising
CC administering a nucleic acid sequence containing at least one
CC unmethylated CpG. The nucleic acid contains an unmethylated CpG
CC dinucleotide affect an immune response in a subject by activating natural
CC killer cells (NK) or redirecting a subject's immune response from a Th2
CC to a Th1 response by inducing monocyte and other cells to produce Th1
CC cytokines. They can be used to treat pulmonary disorders having an
CC immunologic component, such as asthma or environmentally induced airway
CC disease. They can also be used to treat diseases associated with Gram-
CC positive bacterial infections or endotoxaemia including bacterial
CC meningitis, neonatal sepsis, cystic fibrosis, inflammatory bowel disease
CC and liver cirrhosis, Gram-negative pneumonia, Gram-negative abdominal
CC abscess, haemorrhagic shock, disseminated intravascular coagulation, or
CC

```



CC an inflammatory response to lipopolysaccharide  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18  
DB

RESULT 3  
AAV28181  
ID AAV28181 standard; DNA; 18 BP.  
AC AAV28181;  
XX

DT 08-OCT-1998 (first entry)  
XX

DE Antisense oligonucleotide to bcl-2 mRNA.

XX Purification; oligonucleotide; matrix; affinity unit;  
KW affinity purification; antisense; bcl-2; ss.  
XX

OS Synthetic.  
XX

PN MO9827425-A1.  
XX

PD 25-JUN-1998.  
XX

PF 18-DEC-1997; 97WO-US023284.  
XX

PR 19-DEC-1996; 96US-00769951.  
XX

PA (ISIS-) ISIS PHARM INC.  
XX

PI Chen D, Srivatsa GS, Cole DL;  
XX

DR WPI; 1998-362922/31.  
XX

PT Matrix for selective separation of oligonucleotide - useful for, e.g.  
PT large scale purification of anti-sense agents from their deletion  
PT derivatives formed during synthesis.

XX Disclosure; Page 86; 183pp; English.

CC AAV28155-268 represent oligonucleotides which can be purified using the  
CC method of the invention. The specification describes a matrix that  
CC comprises a support and an affinity unit that specifically and reversibly  
CC binds a target oligonucleotide, and comprises a sequence of bases having  
CC the reverse complement of a hybridising portion of the target  
CC oligonucleotide. The matrix is used for affinity purification of  
CC synthetic oligonucleotides, specifically antisense agents, for treatment  
CC of hyperproliferative diseases, specifically for treating a non-pathogen, non-  
CC hyperproliferative disease, e.g. Alzheimer's, for modulating expression  
CC of cell surface proteins, and to inhibit a eukaryotic pathogen,  
CC retrovirus or other viruses

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18  
DB

RESULT 4  
AAV27719

ID AAV27719 standard; DNA; 18 BP.

XX AAV27719;  
AC

DT 01-OCT-1998 (first entry)  
XX

DE Immunostimulatory oligodeoxyribonucleotide of the invention.

XX Immunostimulatory; oligodeoxyribonucleotide; ODN;  
KW unmethylated CPG dinucleotide; activate; lymphocyte; immune response;  
KW Th1; Th1; cytokine; treatment; prevention; asthma; autoimmune disease;  
KW desensitisation therapy; artificial adjuvant; antibody generation; ss.

OS Synthetic.  
XX

PN WO9818810-A1.  
XX

PD 07-MAY-1998.  
XX

PF 30-OCT-1997; 97WO-US019791.  
XX

PR 30-OCT-1996; 96US-00738652.  
XX

PA (IOWA) UNIV IOWA RES FOUND.  
XX

PI Krieg AM, Kline JN;  
XX

DR WPI; 1998-272127/24.  
XX

PT New immunostimulatory nucleic acid molecules - which contain at least one  
PT unmethylated CPG dinucleotide, used for treating e.g. tumours, infections  
PT or autoimmune disease.

XX Disclosure; Page 49; 109pp; English.

CC AAV27641-751 represent immunostimulatory oligodeoxyribonucleotides (ODNs)  
CC of the invention. The ODNs contain at least one unmethylated Cpg  
CC dinucleotide, and have the formula: 5' N1X1CGXN2 3', where at least one  
CC nucleotide separates consecutive Cpgs, X1 is adenine, guanine, or  
CC thymine, X2 is cytosine or thymine, N is any nucleotide and N1+N2 is 0-26  
CC bases with the provision that N1 and N2 does not contain a CCGG tetramer  
CC or more than one CCG or CCG trimer OR 5' NX1X2CGX3X4N 3', where at least  
CC one nucleotide separates consecutive Cpgs, X1 and X2 are selected from  
CC Gpt, Gpg, Gpa, Apt and Apx, X3 and X4 are selected from Tpt or Cpt, N is  
CC any nucleotide, and N1+N2 is 0-26 bases with the provision that N1 and N2  
CC does not contain a CCGG tetramer or more than one CCG or CCG trimer. The  
CC ODNs activate lymphocytes in a subject and redirect a subject's immune  
CC response from a Th2 to a Th1 (e.g. by inducing monocytic cells and other  
CC cells to produce Th1 cytokines, including IL-12, IFN-gamma and GM-CSF).  
CC The ODNs can be used to treat or prevent an asthmatic disorder,  
CC autoimmune diseases, in desensitisation therapy, as an artificial  
CC adjuvant during antibody generation in a mammal such as a mouse or a  
CC human

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
1 TCTCCAGCGTGGCCAT 18  
DB

RESULT 5  
AAV19667  
ID AAV19667 standard; DNA; 18 BP.  
AC AAV19667;  
XX

XX AAV19667;  
XX

DT 25-MAR-2003 (revised)  
DT 12-JUN-1998 (first entry)

XX DE Human bcl-2 antisense oligonucleotide 13.  
XX PR Antisense oligonucleotide; bcl-2 gene; lymphoma; leukaemia; human;  
XX KW cancer; ss.  
XX XX  
XX OS Synthetic.  
XX OS Homo sapiens.  
XX PN US573403-A.  
XX PD 31-MAR-1998.  
XX PF 24-MAR-1994; 94US-00217082.  
XX PR 22-DEC-1988; 88US-00288692.  
XX PR 21-FEB-1992; 92US-00840716.  
XX XX  
XX PA (UYPE-) UNIV PENNSYLVANIA.  
XX PI Reed J;  
XX PI  
XX DR MPI, 1998-229881/20.  
XX PT Anti-sense oligo:nucleotide(s) complementary to Bcl-2 mRNA - useful for  
XX PT treating cancers, e.g. lymphoma(s) and some leukaemia(s).  
XX PS  
XX XX  
XX PS Disclosure; Col 23; 21pp; English.  
XX CC This antisense oligonucleotide is complementary to the translation  
XX CC initiation site of the human bcl-2 mRNA. The Bcl-2 antisense  
XX CC oligonucleotides are phosphorothioate derivatives and can straddle  
XX CC strategic sites such as the translation initiation site, donor and  
XX CC acceptor splicing sites, or sites for transportation or degradation.  
XX CC Blocking translation at such strategic sites prevents the formation of a  
XX CC functional bcl-2 gene product. These oligonucleotides may be used for  
XX CC treating cancers associated with high levels of bcl-2 gene expression,  
XX CC especially lymphomas and some leukaemias. (Updated on 25-MAR-2003 to  
XX CC correct PF field.)  
XX XX  
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 100.0%; Score 18; DB 2; Length 18;  
XX Best Local Similarity 100.0%; Pred. No. 23;  
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 6  
AAZ41948  
ID AAZ41948 standard; DNA; 18 BP.  
XX  
XX AAZ41948;  
XX AC  
XX XX  
XX DT 24-JAN-2000 (first entry)  
XX DE  
XX DE IL-12 secretion inducing Cpg oligonucleotide 93.  
XX XX  
XX KW Cpg oligonucleotide; phosphorothioate; interleukin-12; IL-12; secretion;  
XX KW human PBMC; immune response; cancer; HIV; bacterial disease; asthma;  
XX KW neoplastic disorder; jaagsiekte; B cell; NK cell; ss; cytokine;  
XX KW antigen presenting cell; infection; allergic disease.  
XX XX  
XX OS Synthetic.  
XX OS  
XX PN WO951259-A2.  
XX PD 14-OCT-1999.  
XX PF 02-APR-1999; 99WO-US007335.

XX XX  
XX PR 03-APR-1998; 98US-0080729P.  
XX KW (IOWA ) UNIV IOWA RES FOUND.  
XX XX  
XX PI Krieg AM, Weiner G;  
XX DR MPI, 1999-620169/53.  
XX XX  
XX PT Novel synergistic combinations of immunostimulatory oligonucleotides and  
XX PT immunopotentiating cytokines are useful for stimulating the immune  
XX PT system.  
XX PS  
XX PS Example 8; Page 88; 91pp; English.  
XX CC Sequences AAZ41856-241949 are phosphorothioate Cpg oligonucleotides which  
XX CC are used in the invention to induce interleukin-12 (IL-12) secretion from  
XX CC human PBMC. The invention comprises stimulating an immune response in a  
XX CC subject comprising administering to a subject exposed to an antigen, an  
XX CC immunopotentiating cytokine and an immunostimulatory Cpg oligonucleotide  
XX CC to induce a synergistic antigen specific immune response. The methods are  
XX CC useful for treating cancer by stimulating an antigen specific immune  
XX CC response against a cancer antigen. The methods can also be used to treat  
XX CC neoplastic disorders in humans, including but not limited to: sarcoma,  
XX CC carcinoma, fibroma, lymphoma, melanoma, neuroblastoma, retinoblastoma,  
XX CC and glioma. The methods are also useful for treating infectious diseases,  
XX CC e.g. viral diseases such as HIV, bacterial diseases, and fungal diseases.  
XX CC The methods may also be used to treat allergic diseases, e.g. asthma. The  
XX CC methods and compositions may also be applied to treat cancer and tumours  
XX CC in non human subjects, e.g. cats and dogs. Neoplasias affecting  
XX CC agricultural livestock may also be treated and include leukaemia,  
XX CC haemangioepithelioma and bovine ocular neoplasia. Chronic, infectious,  
XX CC contagious diseases of sheep and goats caused by the bacterium  
XX CC Corynebacterium pseudotuberculosis, and contagious lung tumour of sheep  
XX CC caused by jaagsiekte may also be treated. Cpg oligonucleotides can be  
XX CC useful in activating B cells, NK cells, and antigen presenting cells,  
XX CC such as monocytes and macrophages. Cpg oligonucleotides enhance antibody  
XX CC dependent cellular cytotoxicity and can be used as an adjuvant in  
XX CC conjunction with tumour antigens to protect against a tumour challenge  
XX XX  
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 100.0%; Score 18; DB 2; Length 18;  
XX Best Local Similarity 100.0%; Pred. No. 23;  
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
RESULT 7  
AAZ41905  
ID AAZ41905 standard; DNA; 18 BP.  
XX  
XX AAZ41905;  
XX AC  
XX XX  
XX DT 24-JAN-2000 (first entry)  
XX DE  
XX DE IL-12 secretion inducing Cpg oligonucleotide 50.  
XX XX  
XX KW Cpg oligonucleotide; phosphorothioate; interleukin-12; IL-12; secretion;  
XX KW human PBMC; immune response; cancer; HIV; bacterial disease; asthma;  
XX KW neoplastic disorder; jaagsiekte; B cell; NK cell; ss; cytokine;  
XX KW antigen presenting cell; infection; allergic disease.  
XX XX  
XX OS Synthetic.  
XX OS  
XX PN WO951259-A2.  
XX PD 14-OCT-1999.  
XX PF 02-APR-1999; 99WO-US007335.

XX 03-APR-1998; 98US-0080729P.  
 XX (IOWA ) UNIV IOWA RES FOUND.  
 PA Krieger AM, Weiner G;  
 XX WPI; 1999-620169/53.  
 DR  
 XX  
 PT Novel synergistic combinations of immunostimulatory oligonucleotides and  
 PT immunopotentiating cytokines are useful for stimulating the immune  
 PT system.  
 XX  
 PS Example 8; Page 80; 91pp; English.  
 XX  
 CC Sequences AAZ41856-Z41949 are phosphorothioate Cpg oligonucleotides which  
 CC are used in the invention to induce interleukin-12 (IL-12) secretion from  
 CC human PBMC. The invention comprises stimulating an immune response in a  
 CC subject comprising administering to a subject exposed to an antigen, an  
 CC immunopotentiating cytokine and an immunostimulatory Cpg oligonucleotide  
 CC to induce a synergistic antigen specific immune response. The methods are  
 CC useful for treating cancer by stimulating an antigen specific immune  
 CC response against a cancer antigen. The methods can also be used to treat  
 CC neoplastic disorders in humans, including but not limited to: sarcoma,  
 CC carcinoma, fibroma, lymphoma, melanoma, neuroblastoma, retinoblastoma,  
 CC and glioma. The methods are also useful for treating infectious diseases,  
 CC e.g. viral diseases such as HIV, bacterial diseases, and fungal diseases.  
 CC The methods may also be used to treat allergic diseases, e.g. asthma. The  
 CC methods and compositions may also be applied to treat cancer and tumours  
 CC in non human subjects, e.g. cats and dogs. Neoplasias affecting  
 CC agricultural livestock may also be treated and include leukaemia,  
 CC haemangioepithelioma and bovine ocular neoplasia. Chronic, infectious,  
 CC contagious diseases of sheep and goats caused by the bacterium  
 CC Corynebacterium pseudotuberculosis, and contagious lung tumour of sheep  
 CC caused by Jaagsiekte may also be treated. Cpg oligonucleotides can be  
 CC useful in activating B cells, NK cells, and antigen presenting cells,  
 CC such as monocytes and macrophages. Cpg oligonucleotides enhance antibody  
 CC dependent cellular cytotoxicity and can be used as an adjuvant in  
 CC conjunction with tumour antigens to protect against a tumour challenge  
 XX  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 QY  
 Query Match 100.0%; Score 18; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Db 1 TCTCCAGCGTGGCCCAT 18  
 1 TCTCCAGCGTGGCCCAT 18  
 Db 1 TCTCCAGCGTGGCCCAT 18

XX 24-DEC-1997; 97GB-00027262.  
 XX (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.  
 PA Dalemans WLJ, Gerard CMG;  
 XX WPI; 1999-405485/34.  
 DR  
 XX  
 PT Composition comprising an E6, E7 or E6/E7 fusion protein from HPV to  
 PT induce immune response to HPV.  
 XX  
 PS Claim 11; Page 37; 62pp; English.  
 XX  
 CC AAX78791-X78801 represent nucleic acid sequences which encode novel  
 CC constructs comprising an E6 or E7 protein or E6/E7 fusion protein from  
 CC HPV (represented in AAY25375-Y25386). These constructs are optionally  
 CC linked to an immunological fusion partner and an immunomodulatory Cpg  
 CC oligonucleotide. The products of the invention can be used to induce an  
 CC immune response in a patient to an HPV antigen. They can also be used for  
 CC preventing or treating HPV induced tumours. This sequence represents a  
 CC Cpg oligonucleotide which is used in the method of the invention  
 XX  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 QY  
 Query Match 100.0%; Score 18; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Db 1 TCTCCAGCGTGGCCCAT 18  
 1 TCTCCAGCGTGGCCCAT 18  
 Db 1 TCTCCAGCGTGGCCCAT 18

RESULT 9  
 AAY99434  
 ID AAY99434 standard; DNA; 18 BP.  
 AC AAY99434;  
 XX  
 DT 22-MAR-1999 (first entry)  
 XX  
 DE Antisense oligonucleotide directed against human bcl-2 gene.  
 XX  
 KW Antisense oligonucleotide; human bcl-2 gene; phosphorothioate;  
 KW phosphodiester; lipid-encapsulation; tumour; aberrant gene expression;  
 KW treatment; inflammation; infection; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..18  
 FT /\*tag= a  
 FT /note= "phosphorothioate or phosphodiester bonds"  
 XX  
 WO9851278-A2.  
 PN 19-NOV-1998.  
 PD  
 PF 14-MAY-1998; 98WO-CN000485.  
 XX  
 PR 14-MAY-1997; 97US-00856374.  
 XX  
 PA (INEX-) INEX PHARM CORP.  
 XX  
 PI Sample SC, Klimuk SK, Harasym T, Hope MJ, Ansell SM, Cullis P;  
 PI Scherrer P, DeBeyer D;  
 XX  
 DR WPI; 1999-045179/04.  
 XX  
 PT Composition containing lipid-encapsulated therapeutic agent - useful,  
 PT e.g. for delivering antisense molecules or ribozymes or treating diseases

PT associated with aberrant gene expression.  
XX  
XX Disclosure; Page 23; 98pp; English.  
XX  
XX The present sequence represents an antisense oligonucleotide directed  
CC against the human bcl-2 gene. The oligonucleotide can have either  
CC phosphorothioate or phosphodiester bonds. The oligonucleotide is lipid-  
CC encapsulated using the method of the invention. A composition comprising  
CC lipid-encapsulated particles of a therapeutic agent, e.g. antisense  
CC oligonucleotides, is prepared by mixing at least 2 lipids with buffered  
CC aqueous solution of charged therapeutic agent to form an intermediate  
CC mixture of lipid-encapsulated particles, and changing the pH of the  
CC mixture to neutralise at least some of the external surface charges on  
CC the particles. One lipid has a (de)protonatable group with Ka such that  
CC the lipid is charged at a first pH but neutral at a second pH  
CC (particularly near physiological pH) and the buffer maintains this lipid  
CC in the charged form (i.e. cationic when the therapeutic agent is anionic  
CC in the buffer, or vice versa). The second lipid prevents particle  
CC aggregation during formation of the lipid-therapeutic agent particles.  
CC The composition is used to introduce therapeutic agents into cells, in  
CC vivo or in vitro, particularly to treat or prevent diseases associated  
CC with aberrant gene expression in mammals, specifically tumours,  
CC inflammation or infection  
XX  
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCCAT 18  
1 TCTCCAGCGTGGCCCAT 18  
Db  
RESULT 10  
AAZ31944  
ID AAZ31944 standard; DNA; 18 BP.  
XX  
XX AAZ31944;  
AC  
XX 26-JAN-2000 (first entry)  
DT  
XX  
XX Cpg adjuvant oligo 1002.  
DB  
XX  
XX Cpg adjuvant; vaccine; polyoxyethylene ether; polyoxyethylene ester;  
KW antigen; infection; allergy; cancer; therapy; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO952549-A1.  
PN  
XX  
XX 21-OCT-1999.  
PD  
XX  
XX 29-MAR-1999; 99WO-EP002278.  
PF  
XX  
XX 09-APR-1998; 98GB-00007805.  
PR  
XX 25-SEP-1998; 98GB-00020956.  
PR  
XX  
XX (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.  
PA  
XX  
XX Friele M, Hermand P;  
PI  
XX  
XX WPI; 1999-620290/53.  
DR  
XX  
XX  
XX Vaccine to protect against infections, allergy and cancer.  
PT  
XX  
XX Example 9; Page 26; 52pp; English.  
PS  
XX  
XX This sequence represents a Cpg adjuvant that can be used in the vaccine  
CC composition of the invention. The vaccine comprises a polyoxyethylene  
CC ether or ester (I), not in the form of a vesicle, pharmaceutically  
CC acceptable excipient and an antigen (Ag) or antigenic composition. The

CC vaccine can be used to treat or prevent infections (by bacteria, viruses  
CC or other parasites), allergy and cancer. (I), which are safe, easy to  
CC sterilize and simple to administer, are powerful vaccine adjuvants, able  
CC to induce a systemic immune response when administered (non-invasively)  
CC to the mucosa. The response is at least as good as that from conventional  
CC systemic injection. (I) are effective at low concentration, have low  
CC reactivity and are well tolerated  
XX  
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCCAT 18  
1 TCTCCAGCGTGGCCCAT 18  
Db  
RESULT 11  
AAZ27536/C  
ID AAZ27536 standard; RNA; 18 BP.  
XX  
XX AAZ27536;  
AC  
XX  
XX 27-MAY-1999 (first entry)  
DT  
XX  
XX Synthetic RNA sequence produced by the method of the invention.  
DB  
XX  
XX Silyloxymethyl phosphonate; silyloxymethyl halide; diagnosis; ss;  
KW cyanoethyl phosphoramidate coupling; isomerisation; steric hindrance.  
XX  
XX Synthetic.  
OS  
XX  
XX WO9909044-A1.  
PN  
XX  
XX 25-FEB-1999.  
PD  
XX  
XX 17-AUG-1998; 98WO-EP005215.  
PF  
XX  
XX 18-AUG-1997; 97CH-00001931.  
PR  
XX  
XX (PITS/) PITSCH S.  
PA (WEIS/) WEISS P A.  
PA (JENN/) JENNY L.  
XX  
XX Pitsch S, Weiss PA, Jenny L;  
PI  
XX  
XX WPI; 1999-180963/15.  
DR  
XX  
XX 2-Silyloxymethyl ribonucleosides and their phosphonate derivatives - have  
PT high purity, use in machine synthesis of ribonucleic acids, enable longer  
PT oligonucleotide chain construction, and larger amounts.  
PT  
XX  
XX Example 7; Page 26; 38pp; English.  
PS  
XX  
XX The invention relates to silyloxymethyl protected D- or L-ribonucleosides  
CC and their phosphonates (I), and silyloxymethyl halides (II). (I) are  
CC intermediates for synthesis of RNA-oligonucleotides with predetermined  
CC nucleotide sequence, particularly by machine synthesis. The groups  
CC specified above, apart from those on silyl, are those particularly for  
CC the cyanoethyl phosphoramidate coupling. Uses of the oligoribonucleotide  
CC products in diagnosis, therapy, and as research tools, are well known,  
CC and are not dealt with in detail. (II) is an intermediate for (I). The  
CC silyloxymethyl halide reagent is easy to prepare, and yields are high.  
CC Introduction of the silyloxymethyl group into the ribonucleoside is  
CC simple and rapid, and the acetal bond formed does not migrate,  
CC eliminating particularly the prior art problem of 2' to 3' isomerisation.  
CC The methylenedioxy group spacer between the silyl group and nucleoside  
CC ring results in less steric hindrance than bulky direct silyloxy  
CC linkages, enabling first, a range of choices for the silyl substituents,  
CC to provide, e.g., acid or base stability; and second, higher yields in  
CC coupling. Purer products are therefore obtained than in prior art,

CC enabling larger quantities and longer chains of oligoribonucleotides to  
CC be synthesised successfully, and in shorter times  
XX  
SQ Sequence 18 BP; 4 A; 4 C; 8 G; 0 T; 2 U; 0 Other;

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18  
DB 18 TCTCCAGCGTGCGCCAT 1

RESULT 12  
AAK18702  
ID AAK18702 standard; DNA; 18 BP.

AC AAK18702;

DT 10-MAY-1999 (first entry)

DE Target bcl-2 antisense oligonucleotide BCL-2.

KW Cellular adhesion protein; proliferation; antisense oligonucleotide;  
KW alimentary canal; transport; gastrointestinal mucosa; cancer;  
KW Alzheimer's disease; beta-thalassemia; malaria; viral infection; HIV;  
KW inflammation; ss.

OS Synthetic.

PN WO9901579-A1.

PD 14-JAN-1999.

PF 01-JUL-1998; 98WO-US013574.

PR 01-JUL-1997; 97US-0086829.

PA (ISTS-) ISIS PHARM INC.

PI Teng C, Hardee G;

DR WPI; 1999-106077/09.

PT Composition comprising nucleic acid and penetration enhancer - used  
PT particularly for delivering therapeutic antisense oligonucleotides across  
PT the gastrointestinal mucosa, provides high bioavailability.

PS Example 2; Page 86; 115pp; English.

CC A pharmaceutical composition has been developed which comprises a nucleic  
CC acid and at least one penetration enhancer. The compositions are used;  
CC (i) to treat or prevent any disease or disorder that can be treated with  
CC the nucleic acid, e.g. cancer, Alzheimer's disease, beta-thalassemia,  
CC malaria, viral infections (including human immune deficiency virus  
CC (HIV)), inflammation, in human or animal medicine; (ii) to investigate  
CC the role of a gene or gene product in non-human animals; and (iii) to  
CC modulate gene expression in cells, tissues or organs. The compositions  
CC provide bioavailability of at least 15, preferably 17-35%. The  
CC penetration enhancer improves: (i) transport of the nucleic acid across  
CC the mucosa of the alimentary canal and into cells; and (ii) increases  
CC stability of the nucleic acid. Oral administration avoids the  
CC complications and expense of intravenous or other methods of  
CC administration. AAK1869 to AAK18799 and AAK18801 represent antisense  
CC oligonucleotides which can be used as the nucleic acid in the method of  
CC the invention

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18  
DB 1 TCTCCAGCGTGCGCCAT 18

RESULT 13  
AAK88537  
ID AAK88537 standard; DNA; 18 BP.

AC AAK88537;

DT 10-SEP-1999 (first entry)

DE Cytosine-guanosine dinucleotide motif oligonucleotide #4.

KW Cytosine-guanosine dinucleotide motif; CpG; immunomodulation;  
KW unmethylated; vaccine; immunostimulation; immune response;  
KW T-independent type 1 antigen; T-independent type 2 antigen;  
KW polysaccharide conjugate antigen; ss.

OS Synthetic.

PN WO9933488-A2.

PD 08-JUL-1999.

PF 18-DEC-1998; 98WO-EP008562.

PR 24-DEC-1997; 97GB-00027262.

PA (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.

PI Dalemans WLJ, Laferrriere CMJ, Prieels J;

DR WPI; 1999-405369/34.

PT A vaccine composition for inducing an immune response to T-independent  
PT type 1 or type 2 antigen or polysaccharide conjugate antigen.

PS Claim 6; Page 31; 35pp; English.

CC The present invention describes a formulation (A) comprising a cytosine-  
CC guanosine dinucleotide motif (CpG) oligonucleotide and T-independent type  
CC 1 or type 2 antigens or polysaccharide conjugate antigen. The present  
CC sequence represent a specifically claimed CpG oligonucleotide. A vaccine  
CC composition comprising the formulation is used for inducing an immune  
CC response to T-independent type 1 or type 2 antigen or polysaccharide  
CC conjugate antigen. The use of immunostimulatory CpG oligonucleotide acts  
CC as an adjuvant to pneumococcal polysaccharides

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCGCCAT 18  
DB 1 TCTCCAGCGTGCGCCAT 18

RESULT 14

AAK33514  
ID AAK33514 standard; DNA; 18 BP.

AC AAK33514;

DT 07-JUL-1999 (first entry)

DE BCL2-targeted antisense oligonucleotide SEQ ID NO:45.

KW Combinatorial antisense library; oligonucleotide analogue; RNase

KW ribozyme; cleavage; anchor; binding; target RNA; ss.  
XX Synthetic.  
OS  
XX WO9118238-A1.  
PN  
XX 15-APR-1999.  
PD  
XX 28-SEP-1998; 98WO-US020361.  
PF  
XX 02-OCT-1997; 97US-0060673P.  
PR 18-AUG-1998; 98US-00136080.  
XX  
XX (OASIS-) OASIS BIOSCIENCES INC.  
PA  
XX Riley TA, Brown BD, Arnold LJ;  
PI  
XX WPI; 1999-264039/22.  
DR  
XX  
XX Oligonucleotide analog compositions capable of coupling to form antisense  
PT molecules.  
XX  
XX Example 9; Page 45; 71pp; English.  
PS  
XX The present invention describes a composition comprising two  
CC oligonucleotide analogues, each having a binding domain and a coupling  
CC moiety, where the binding domains are capable of hybridizing to a target  
CC polynucleotide and the coupling moieties are capable of coupling to each  
CC other in the absence of a target molecule. The composition/compound is  
CC used to cleave an RNA target. The compositions can be used to determine  
CC an optimal antisense site for a given mRNA or an optimal ribozyme  
CC cleavage site for a target RNA. By separating the antisense molecules  
CC into two or more pieces, a comprehensive antisense library can be  
CC prepared in advance, rather than synthesizing a plurality of candidate  
CC antisense molecules as needed. A complete library of every possible 17-  
CC mer oligonucleotide, using the four natural bases, would consist of 417  
CC (or about 1.7 x 10<sup>10</sup>) molecules. By providing the antisense molecules in  
CC at least two components, e.g. a library of 8-mers and a library of 9-  
CC mers, assembled quickly as needed, the library size is reduced to 48 +  
CC 49, or 327 650 molecules. The complexity of the library can be further  
CC reduced by substituting one or more universal or degenerate bases for  
CC some of the natural bases. The present sequence represents an  
CC oligonucleotide, which is used in an example from the present invention  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18  
  
RESULT 15  
AAZ33693  
ID AAZ33693 standard; DNA; 18 BP.  
XX  
XX AAZ33693;  
AC  
XX  
XX 18-JUN-1999 (first entry)  
DT  
XX  
XX Deletion sequence oligonucleotide 146.  
DE  
XX  
XX Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;  
KM probe; cellular adhesion modulator; cellular proliferation modulator;  
KM human retrovirus; human immunodeficiency virus; non-human retrovirus;  
KM HIV; primer; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO911820-A1.  
PN

XX  
PD 11-MAR-1999.  
XX  
XX 01-SEP-1998; 98WO-US018084.  
PF  
XX  
XX 02-SEP-1997; 97US-00923771.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Chen D, Srivatsa GS;  
PI  
XX WPI; 1999-205198/17.  
DR  
XX  
XX New compositions comprising sensor arrays made up of unique probe  
PT oligonucleotides - useful for characterizing a sample of target deletion  
PT oligonucleotides.  
XX  
XX Example 9; Page 152; 163pp; English.  
PS  
XX  
XX This invention describes a novel composition comprising a number of  
CC sensor arrays, where each array comprises a unique probe oligonucleotide,  
CC which is the reverse complement of part of a unique target  
CC oligonucleotide present in a mixture of target deletion sequence  
CC oligonucleotides. The compositions form a method for characterizing a  
CC sample of target deletion oligonucleotides which are labelled and  
CC hybridize with the probe oligonucleotides of the sensor arrays. Such  
CC oligonucleotides and their targets are represented in AAZ33548-X23709.  
CC Oligonucleotides characterized by the method form pharmaceutical  
CC compositions that are useful for modulating cellular adhesion or  
CC proliferation, and being active against a eukaryotic pathogen, a human  
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human  
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory  
CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable  
CC characterization of deletion sequence oligonucleotides having related,  
CC but different nucleobase sequences, and quantification of different  
CC species of deletion sequence ("target") oligonucleotides in a mixture.  
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for  
CC its reverse complement is not modified, the method may be performed using  
CC oligodeoxynucleotides  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 100.0%; Score 18; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 TCTCCAGCGTGGCCAT 18  
|||  
Db 1 TCTCCAGCGTGGCCAT 18  
  
RESULT 16  
AAZ60975  
ID AAZ60975 standard; DNA; 18 BP.  
XX  
XX AAZ60975;  
AC  
XX  
XX 30-MAY-2000 (first entry)  
DT  
XX  
XX Nucleotide sequence of an immunostimulatory CpG oligonucleotide.  
DE  
XX  
XX Immunostimulatory; stereoisomer; CpG oligonucleotide; Th2; Th1; asthma;  
KM allergic reaction; allergen; cancer antigen; cancer; immunoinhibitory;  
KM inflammatory disease; inflammatory bowel disease; autoimmune disease;  
KM gingivitis; psoriasis; sepsis; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO200006588-A1.  
PN  
XX 10-FEB-2000.  
PD  
XX  
XX 27-JUL-1999; 99WO-US017100.  
PF

XX 27-JUL-1998; 98US-0094370P.  
 XX (IOWA ) UNIV IOWA RES FOUND.  
 PA (CPGI-) CPG IMMUNOPHARMACEUTICALS INC.  
 XX Krieg AM;  
 XX WPI; 2000-195254/17.  
 DR  
 XX  
 PT Immunostimulatory and immunoinhibitory stereoisomers of Cpg  
 PT oligonucleotides useful for immunotherapy of cancer.  
 XX  
 PS Disclosure; Page 11; 88pp; English.  
 XX  
 CC AA269933-261015 represent immunostimulatory stereoisomers of Cpg  
 CC oligonucleotides. The sequences are derived from generic nucleic acid  
 CC sequence, from which immunoinhibitory sequences may also be derived. The  
 CC immunostimulatory nucleic acids can be co-administered with an antigen to  
 CC induce an antigen-specific immune response. The immunostimulatory nucleic  
 CC acids can also be used in methods for redirecting a subject's immune  
 CC response from a Th2 to a Th1, for treating asthma, for desensitizing a  
 CC subject against the occurrence of an allergic reaction in response to  
 CC contact with an allergen, for activating an immune cell, especially a  
 CC lymphocyte or a dendritic cell expressing a cancer antigen or for  
 CC treating cancer. The immunoinhibitory nucleic acid can be used to prevent  
 CC an immune response, especially where the immune response in the subject  
 CC is excessive due to having received an immune stimulating compound. The  
 CC immunoinhibitory nucleic acid can be used to treat a subject having or at  
 CC risk of an inflammatory disease, especially inflammatory bowel disease,  
 CC autoimmune disease, gingivitis, psoriasis and sepsis  
 XX  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 100.0%; Score 18; DB 3; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 Db 1 TCTCCAGCGTGGCCAT 18  
 RESULT 17  
 AA248024  
 ID AA248024 standard; DNA; 18 BP.  
 XX  
 AC AA248024;  
 XX  
 DT 08-MAR-2000 (first entry)  
 XX  
 DE Immune remodeling inducing Cpg oligonucleotide SEQ ID NO:104.  
 XX  
 KW Haematopoiesis; regulation; Cpg oligonucleotide; phosphorothioate;  
 KW immune remodeling; thrombopoiesis; anaemia; immune system; cancer;  
 KW immune response; allergic reaction; infectious disease; asthma;  
 KW thrombocytopenia; immunohaemolytic disorder; genetic disorder;  
 KW haemoglobinopathy; kidney failure; chronic inflammatory disorder;  
 KW rheumatoid arthritis; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9598118-A2.  
 XX  
 PD 18-NOV-1999.  
 XX  
 PF 14-MAY-1999; 99WO-IB001285.  
 XX  
 PR 14-MAY-1998; 98US-0085516P.  
 XX  
 PR 02-FEB-1999; 99US-00241653.  
 XX  
 PA (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.  
 PA (CPGI-) CPG IMMUNOPHARMACEUTICALS INC.

XX Wagner H, Lipford G;  
 PI  
 XX  
 DR WPI; 2000-062261/05.  
 XX  
 PT Use of Cpg containing oligonucleotides for, e.g. inducing an antigen-  
 PT specific immune response.  
 XX  
 PS Example 1; Page 67; 116pp; English.  
 XX  
 CC The present invention describes a method using Cpg containing  
 CC oligonucleotides (ONs) for regulating immune system remodeling and for  
 CC regulating haematopoiesis. The method for inducing an antigen-specific  
 CC immune response comprises: (1) administering an ON having a sequence  
 CC including at least the formula (I) and (2) exposing the subject to an  
 CC antigen at least 3 days after the ON is administered to the subject to  
 CC produce an antigen-specific immune response: 5' X1CXX2 3' (I), where the  
 CC ON = includes at least 8 nucleotides; C and G = unmethylated, and X1 and  
 CC X2 = nucleotides. The method can be used for inducing an immune response  
 CC against an antigen such as cells, cell extracts, proteins,  
 CC polysaccharides, polysaccharide conjugates, lipids, glycolipids,  
 CC carbohydrate, viral extracts, viruses, bacteria, fungi, parasites and  
 CC allergens. It can be used in a subject at risk of developing cancer or an  
 CC allergic reaction. It can also be used for treating an infectious  
 CC disease, allergic diseases and asthma, as well as thrombocytopenia which  
 CC is drug-induced, due to an autoimmune disorder such as idiopathic  
 CC thrombocytopenic purpura, or resulting from accidental or therapeutic  
 CC radiation exposure. It can also be used for treating anaemia such as drug  
 CC -induced anaemia, immunohaemolytic disorder, genetic disorders such as  
 CC haemoglobinopathy and inherited haemolytic anaemia, inadequate production  
 CC despite adequate iron stores, chronic disease such as kidney failure, and  
 CC chronic inflammatory disorder such as rheumatoid arthritis, or anaemia  
 CC resulting from accidental or therapeutic radiation exposure. AA247932 to  
 CC AA248029 represent phosphorothioate Cpg oligonucleotides used in the  
 CC exemplification of the present invention  
 XX  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 100.0%; Score 18; DB 3; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 Db 1 TCTCCAGCGTGGCCAT 18  
 RESULT 18  
 AA247981  
 ID AA247981 standard; DNA; 18 BP.  
 XX  
 AC AA247981;  
 XX  
 DT 08-MAR-2000 (first entry)  
 XX  
 DE Immune remodeling inducing Cpg oligonucleotide SEQ ID NO:59.  
 XX  
 KW Haematopoiesis; regulation; Cpg oligonucleotide; phosphorothioate;  
 KW immune remodeling; thrombopoiesis; anaemia; immune system; cancer;  
 KW immune response; allergic reaction; infectious disease; asthma;  
 KW thrombocytopenia; immunohaemolytic disorder; genetic disorder;  
 KW haemoglobinopathy; kidney failure; chronic inflammatory disorder;  
 KW rheumatoid arthritis; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9598118-A2.  
 XX  
 PD 18-NOV-1999.  
 XX  
 PF 14-MAY-1999; 99WO-IB001285.  
 XX  
 PR 14-MAY-1998; 98US-0085516P.  
 XX

PR 02-FEB-1999; 99US-00241653.  
XX (CPG1-) CPG IMMUNOPHARMACEUTICALS GMBH.  
PA (CPG1-) CPG IMMUNOPHARMACEUTICALS INC.  
XX  
XX  
PI Wagner H, Lipford G;  
XX WPI; 2000-062261/05.  
XX  
XX Use of Cpg containing oligonucleotides for, e.g. inducing an antigen-  
PT specific immune response.  
XX  
XX Example 1; Page 66; 116pp; English.  
XX  
XX The present invention describes a method using Cpg containing  
CC oligonucleotides (ONs) for regulating immune system remodeling and for  
CC regulating haematopoiesis. The method for inducing an antigen-specific  
CC immune response comprises: (1) administering an ON having a sequence  
CC including at least the formula (I): and (2) exposing the subject to an  
CC antigen at least 3 days after the ON is administered to the subject to  
CC produce an antigen-specific immune response: 5' X1CGX2 3' (1), where the  
CC ON = includes at least 8 nucleotides; C and G = unmethylated, and X1 and  
CC X2 = nucleotides. The method can be used for inducing an immune response  
CC against an antigen such as cells, cell extracts, proteins,  
CC polysaccharides, polysaccharide conjugates, lipids, glycolipids,  
CC carbohydrate, viral extracts, viruses, bacteria, fungi, parasites and  
CC allergens. It can be used in a subject at risk of developing cancer or an  
CC allergic reaction. It can also be used for treating an infectious  
CC disease, allergic diseases and asthma, as well as thrombocytopaenia which  
CC is drug-induced, due to an autoimmune disorder such as idiopathic  
CC thrombocytopenic purpura, or resulting from accidental or therapeutic  
CC radiation exposure. It can also be used for treating anaemia such as  
CC induced anaemia, immunohaemolytic disorder, genetic disorders such as  
CC haemoglobinopathy and inherited haemolytic anaemia, inadequate production  
CC despite adequate iron stores, chronic disease such as kidney failure, and  
CC chronic inflammatory disorder such as rheumatoid arthritis, or anaemia  
CC resulting from accidental or therapeutic radiation exposure. AAZ47932 to  
CC AAZ48029 represent phosphorothioate Cpg oligonucleotides used in the  
XX exemplification of the present invention  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 100.0%; Score 18; DB 3; Length 18;  
XX Best Local Similarity 100.0%; Pred. No. 23;  
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
QY 1 TCTCCAGCGTGGCCAT 18  
XX |||||  
DB 1 TCTCCAGCGTGGCCAT 18  
XX  
RESULT 19  
XX AAA14470  
ID AAA14470 standard; DNA; 18 BP.  
XX  
XX AAA14470;  
XX  
XX 21-AUG-2000 (first entry)  
XX  
XX Phosphorothioate oligonucleotide.  
XX  
XX Immunostimulatory oligonucleotide; adjuvant; mucosal immunity;  
XX secretory immunoglobulin A production; sIgA; Th1 phenotype;  
XX toxicity study; BCL-2; human; ds.  
XX  
XX Synthetic.  
XX  
XX  
XX Key Location/Qualifiers  
XX modified\_base 1..18  
XX FT /\*tag= a  
XX FT /note= "Phosphorothioate linkages"  
XX  
XX WO200020039-A1.

XX  
XX 13-APR-2000.  
PD  
XX  
XX 15-SEP-1999; 99WO-US021203.  
PR  
XX  
XX 05-OCT-1998; 98US-00167039.  
PR  
XX  
XX (REGC ) UNIV CALIFORNIA.  
PA  
XX  
PI Raz B, Horner AA, Carson DA;  
XX WPI; 2000-303647/26.  
XX  
XX Immunostimulatory oligonucleotide adjuvant induces mucosal immunity to an  
PT antigen in a mammalian host through production of secretory  
PT immunoglobulin A.  
XX  
XX Example 5; Page 26; 64pp; English.  
XX  
XX The invention relates to a method of inducing mucosal immunity to an  
XX antigen in a mammalian host, including the production of secretory  
XX immunoglobulin A (sIgA). Immune protection in the mucosa (the principal  
XX site of entry of most foreign antigens) is mediated by mucosa-associated  
XX lymphoid tissue, epithelial and distinct B-cell, T-cell and accessory  
XX cell sub-populations. The primary immune response which characterises the  
XX induction of mucosal immunity to an antigen is sIgA production by  
XX activated B-cells. The method comprises introducing an immunostimulatory  
XX oligonucleotide (ISS-ODN) and the antigen into host mucosa, where the ISS  
XX ODN includes a core nucleotide sequence. The core nucleotide sequence is  
XX 5'-Purine-Purine-C-G-Pyrimidine-Pyrimidine-3', specific examples of which  
XX are AACGTT, AGCGTC and GACGTT (SEQ ID Nos 1-3). A specific example of an  
XX ISS-ODN is DY1018 (AAA14467). The ISS-ODN is used as an adjuvant with an  
XX antigen for stimulating mucosal immunity. The level of sIgA production  
XX induced in the host is at least 3 times the magnitude of sIgA production  
XX achievable in response to introduction of the antigen and cholera toxin  
XX tissue and is equivalent or greater than the magnitude of sIgA production  
XX achievable in response to introduction of the antigen response is stimulated  
XX to antigen specific IGA production. The host immune response is stimulated  
XX while antigen-induced IgE production is avoided. The adjuvant has little  
XX or no known toxicity in mammals and its efficacy is comparable to that of  
XX cholera toxin which is used as a mucosal adjuvant. The present sequence  
XX CC represents a human BCL-2 phosphorothioate oligonucleotide previously used  
XX in toxicity studies in humans. The study indicates that the ISS-ODNs of  
XX the invention should not cause significant toxicity  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 100.0%; Score 18; DB 3; Length 18;  
XX Best Local Similarity 100.0%; Pred. No. 23;  
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
QY 1 TCTCCAGCGTGGCCAT 18  
XX |||||  
DB 1 TCTCCAGCGTGGCCAT 18  
XX  
RESULT 20  
XX AAZ87997  
ID AAZ87997 standard; DNA; 18 BP.  
XX  
XX AAZ87997;  
XX  
XX 31-MAY-2000 (first entry)  
XX  
XX BBTE-labeled oligonucleotide.  
XX  
XX Fluorescence; dibenzazole derivative; enzyme detection;  
XX KM fluorescent acid-base indicator; ss.  
XX  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
XX



```

FT modified_base 1
FT /tag= a
FT /note= "BTE-labeled"
XX
XX
XX WO200004007-A1.
XX
XX
XX 27-JAN-2000.
XX
XX
XX 16-JUL-1999; 99WO-US016123.
XX
XX
XX 17-JUL-1998; 98US-00118220.
XX
XX 21-JUL-1998; 98WO-US015080.
XX
XX (PROM-) PROMEGA BIOSCIENCES INC.
XX
XX Brown LR, Xu C;
XX
XX WPI; 2000-237208/20.
XX
XX
XX New fluorescent dibenzazole derivatives useful as acid-base indicators or
XX in biological assays, e.g., for detection of enzymes, DNA or antibodies
XX in samples.
XX
XX Example 11; Page 31; 52pp; English.
XX
XX The invention provides fluorescent dibenzazole derivatives of specified
XX formulae. The derivatives are fluorescent compounds which may be used for
XX detection of agents in samples. They may be used, e.g., for detection of
XX enzymes in biological samples, detection of antibodies to specific
XX analytes conjugated with appropriate enzymes, or detection of protein,
XX DNA or RNA samples directly or indirectly with enzymes using gels and
XX membranes for separation and visualization. Typically, the compound is
XX added to a biological sample and the hydrolysis of the compound is
XX detected by fluorescence. They can also be used as fluorescent acid-base
XX indicators. The derivatives are stable in a variety of aqueous
XX environments, and have solubility characteristics suitable for various
XX applications. They can be used at a variety of pH ranges. They are easily
XX detectable above background interference, and exhibit large Stokes'
XX shifts. The present sequence represents a labeled oligonucleotide used in
XX the course of the invention.
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 100.0%; Score 18; DB 3; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 23;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 TCTCCAGCGTGGCCAT 18
XX 1 TCTCCAGCGTGGCCAT 18
XX
XX Db
XX
XX RESULT 21
XX AA247850
XX ID AA247850 standard; DNA; 18 BP.
XX
XX AA247850;
XX
XX 07-MAR-2000 (first entry)
XX
XX Immunostimulatory oligonucleotide sequence SEQ ID NO:51.
XX
XX Mucosal immunity; immunostimulatory; CpG motif; immune response; antigen;
XX allergic reaction; cancer; infectious disease; asthma; eczema;
XX allergic rhinitis; coryza; hay fever; conjunctivitis; bronchial asthma;
XX urticaria; food allergy; atopic condition; mucosal delivery; ss.
XX
XX Synthetic.
XX
XX WO9961056-A2.
XX
XX 02-DEC-1999.
XX

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PF 21-MAY-1999; 99WO-US011359.
XX
XX
XX 22-MAY-1998; 98US-0086393P.
XX
XX (LOB-) LOEB HEALTH RES INST AT OTTAWA HOSPITAL.
XX (CPG-) CPG IMMUNOPHARMACEUTICALS INC.
XX
XX McCluskie MJ, Davis HL;
XX
XX WPI; 2000-062585/05.
XX
XX
XX Use of CG containing oligonucleotides as adjuvants for inducing an immune
XX response.
XX
XX Disclosure; Page 25; 116pp; English.
XX
XX The present invention describes a method using CpG containing
XX oligonucleotides (ONs) as adjuvants for inducing an immune response. The
XX method for inducing a mucosal immune response (MIR) comprises: (1)
XX administering to a mucosal surface of a subject an ON, having a sequence
XX including at least the formula (1); and (2) exposing the subject to an
XX antigen to induce the MIR, where the antigen is not encoded in a nucleic
XX acid vector: 5'X1X2CGX3X43' (1), where C and G = unmethylated, and X1,
XX X2, X3 and X4 = nucleotides. The method can be used for treating a
XX subject at risk of developing an allergic reaction, cancer or infectious
XX disease. It can be used for treating asthmatic subjects, eczema, allergic
XX rhinitis or coryza, hay fever, conjunctivitis, bronchial asthma,
XX urticaria, food allergies or other atopic conditions. The antigen may be
XX derived from infectious organisms such as infectious bacteria, viruses,
XX parasites or fungi. It can be used in humans or animals, e.g. bovine,
XX equine, feline, swine, aquatic or avian species. The ONs act as potent
XX mucosal adjuvants to induce immune responses at both local and remote
XX sites against an antigen administered to the mucosal tissue. Both
XX systemic and mucosal immunity are induced by mucosal delivery of the ONs.
XX AA247808 to AA247891 represent examples of immunostimulatory
XX oligonucleotides given in the present invention
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 100.0%; Score 18; DB 3; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 23;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 TCTCCAGCGTGGCCAT 18
XX 1 TCTCCAGCGTGGCCAT 18
XX
XX Db
XX
XX RESULT 22
XX AAA38517
XX ID AAA38517 standard; DNA; 18 BP.
XX
XX AAA38517;
XX
XX 29-AUG-2000 (first entry)
XX
XX Oligonucleotide used to make DNA/topotecan liposomal complexes.
XX
XX Camptothecin; lactone form; chemotherapy; drug delivery; topotecan; TPT;
XX Hyacinth; liposome; oligonucleotide; drug complex; anticancer;
XX topoisomerase inhibitor; gene therapy; ds.
XX
XX Unidentified.
XX
XX WO200021370-A1.
XX
XX 20-APR-2000.
XX
XX 14-OCT-1998; 98WO-US020941.
XX
XX 14-OCT-1998; 98WO-US020941.
XX
XX (KENT ) UNIV KENTUCKY RES FOUND.
XX

```

XX Yang D, Demir AS, Chavan AJ, Burke TG;  
XX  
XX WPI; 2000-329047/28.  
XX  
XX  
XX New chemotherapeutic compositions comprising an oligonucleotide-  
XX camptothecin drug complex, useful for treating cancers in a combination  
XX therapy.  
XX  
XX Example 3; Page 65; 87pp; English.  
XX  
XX The invention relates to a novel chemotherapeutic composition comprising  
XX an oligonucleotide-camptothecin drug complex. The complex incorporates  
XX the active lactone form of a camptothecin drug, and the camptothecin  
XX dissociates from the oligonucleotide within the cell to exert its  
XX therapeutic activities. Camptothecin family compounds are anticancer  
XX drugs which function by inhibiting topoisomerase I (TopoI), thus  
XX inhibiting DNA replication. The compositions containing the  
XX oligonucleotide-camptothecin complex, which may be incorporated into a  
XX viral or a non-viral vector, are used for combined gene and camptothecin  
XX drug therapy in the treatment of cancer. The oligonucleotide can bind  
XX selectively to the lactone forms of camptothecins, conserving the agents in  
XX their biologically active lactone forms. The compositions are stabilised  
XX over a wide pH range and can provide for the controlled, targeted and  
XX stable delivery of a camptothecin drug to target tissue. In addition to  
XX stabilising camptothecin, the oligonucleotides carried in the vectors can  
XX serve an additional role as gene therapy agents. This may augment the  
XX effects of camptothecin on the host target tissue. The present sequence  
XX represents an oligonucleotide of unknown origin used in an  
XX exemplification of the invention. This oligonucleotide was complexed with  
XX the camptothecin anticancer drug topotecan (TPT, Hycamtin) and  
XX encapsulated in liposomes  
XX  
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 23  
ID AAA90450  
XX AAA90450 standard; DNA; 18 BP.  
XX  
AC AAA90450;

XX 10-JAN-2001 (first entry)

XX Cpg adjutant oligonucleotide, SEQ ID NO:4.

XX Cpg oligonucleotide; Cpg motif; adjuvant; microdroplet emulsion;  
XX microemulsion; adsorbent microparticle; vaccine; Th1 immune response;  
XX viral infection; bacterial infection; parasitic infection; HCV; HBV;  
XX hepatitis C virus; hepatitis B virus; herpes simplex virus; HSV; HIV;  
XX human immunodeficiency virus; cytomegalovirus; CMV; influenza virus;  
XX rabies virus; cholera; diphtheria; tetanus; pertussis;  
XX Helicobacter pylori; Haemophilus influenzae; malaria; ss.

XX Synthetic.

XX MO200050006-A2.

XX 31-AUG-2000.

XX 09-FEB-2000; 2000WO-US003331.

XX 26-FEB-1999; 99US-0121858P.

XX 29-JUL-1999; 99US-0146391P.  
XX 28-OCT-1999; 99US-0161997P.

XX (CHIR ) CHIRON CORP.  
XX  
XX O'hagan D, Oct GS, Donnelly J, Kazaz J, Ugozzoli M, Singh M;  
XX Barackman J;  
XX WPI; 2000-587123/55.  
XX  
XX  
XX Microemulsion having an adsorbent surface comprising a microdroplet  
XX emulsion consisting of a metabolizable oil and an emulsifying agent which  
XX is a detergent, useful as a vaccine to treat bacterial, viral, and  
XX parasitic infection.  
XX  
XX Claim 17; Page 40; 95pp; English.

XX The invention relates to a microdroplet emulsion (microemulsion) with an  
XX adsorbent surface, and which comprises a metabolisable oil and an  
XX emulsifying agent (a detergent). It also relates to a composition  
XX comprising the microemulsion and a microparticle with an adsorbent  
XX surface, where the microparticle comprises a polymer selected from a  
XX poly(alpha-hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone,  
XX a polyorthoester, a polyanhydride, and a polycyanosacrylate, and a second  
XX detergent. The surface of the microparticles efficiently adsorb  
XX biologically active macromolecules such as DNA, polypeptides, antigens,  
XX hormones, pharmaceuticals, enzymes, mediators of transcription or  
XX translation, metabolic intermediates and adjuvants. Additionally, a  
XX second biologically active molecule may be encapsulated within the  
XX microparticle. The microemulsion can be used in methods of immunising a  
XX host animal, particularly a human, against a viral, bacterial or  
XX parasitic infection, and in methods of increasing a Th1 immune response.  
XX The microemulsions (having the appropriate antigens adsorbed) may be  
XX particularly used as vaccines for hepatitis C virus (HCV), hepatitis B  
XX virus (HBV), herpes simplex virus (HSV), human immunodeficiency virus  
XX (HIV), cytomegalovirus (CMV), influenza virus, and rabies virus; the  
XX bacteria which cause cholera, diphtheria, tetanus and pertussis;  
XX Helicobacter pylori and Haemophilus influenzae; and malaria-causing  
XX parasites. Sequences AAA90447-A90467 represent Th1 lymphocyte stimulating  
XX oligonucleotides containing at least one Cpg motif which are claimed for  
XX use as adjuvants in the compositions of the invention

XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 24  
ID AA299003  
XX AA299003 standard; DNA; 18 BP.  
XX  
AC AA299003;

XX 21-JUN-2000 (first entry)

XX Cpg motif for immunostimulatory oligonucleotide 1758.

XX Immunoprotective; vaccine; antigen; saponin adjuvant; immune response;  
XX immunostimulatory oligonucleotide; unmetabolized Cpg dinucleotide; mammal;  
XX human; animal; ss.

XX Synthetic.

XX MO200009159-A1.

XX 24-FEB-2000.

XX 06-AUG-1999; 99WO-US017956.

PR 10-AUG-1998; 98US-0095913P.  
 PR 08-APR-1999; 99US-0128608P.  
 XX  
 PA (AQUI-) AQUILA BIOPHARMACEUTICALS INC.  
 XX  
 PI Kensil CA;  
 XX  
 DR WPI; 2000-224181/19.  
 XX  
 PT A vaccine composition comprising an antigen, saponin adjuvant and  
 PT immunostimulatory Cpg oligonucleotide, useful for stimulating immunity  
 PT and increasing immune responses.  
 XX  
 PS Claim 10; Page 19; 38pp; English.  
 XX  
 CC The invention relates to a vaccine composition comprising an antigen, a  
 CC saponin adjuvant and an immunostimulatory oligonucleotide. The  
 CC immunostimulatory oligonucleotide preferably comprises at least one  
 CC unmethylated Cpg dinucleotide. This sequence represents an example of the  
 CC immunostimulatory oligonucleotide. The vaccine composition increases the  
 CC immune response to the antigen when administered to a mammal, especially  
 CC a human or animal. It further stimulates immunity and especially enhances  
 CC antibody production to the antigen, preferably in a positive synergistic  
 CC manner. It further enhances cell-mediated immunity. The immune adjuvant  
 CC in particular can be used to increase the immune response to an antigen  
 CC in an individual or a test system  
 CC  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 100.0%; Score 18; DB 3; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 Db 1 TCTCCAGCGTGGCCAT 18  
 RESULT 25  
 AA298660  
 ID AA298660 standard; DNA; 18 BP.  
 XX  
 AC AA298660;  
 XX  
 DT 05-JUN-2000 (first entry)  
 XX  
 DE Human Bcl-2 therapeutic antisense oligonucleotide sequence Bcl-2.  
 XX  
 KW Antisense oligonucleotide; phosphorothioate; inflammatory disease; Bcl-2;  
 KW tumour; gene therapy; aberrant gene expression; treatment;  
 KW infectious disease; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..18  
 FT /\*tag= a  
 FT /note="Optionally phosphorothioate internucleotide  
 FT linkages"  
 CA2271582-A1.  
 14-NOV-1999.  
 13-MAY-1999; 99CA-02271582.  
 14-MAY-1998; 98US-00078955.  
 (KIMM/) KIMMUK S. K.  
 (HARA/) HARASTY T.  
 (HOPE/) HOPE M J.  
 (ANSEL/) ANSELL S M.  
 (CULL/) CULLIS P R.

PA (MOKW/) MOK W W K.  
 PA (SCHE/) SCHERRER P.  
 PA (SEMP/) SEMPLE S C.  
 XX  
 PI Kimmuk SK, Harasym T, Hope MJ, Ansell SM, Cullis PR, Mok WWK;  
 PI Scherrer P, Semple SC;  
 XX  
 DR WPI; 2000-225058/20.  
 XX  
 PT A method for delivering antisense oligonucleotides to cells using lipid  
 PT capsules comprising steric barrier lipids.  
 XX  
 PS Disclosure; Page 26; 99pp; English.  
 XX  
 CC This sequence represents an antisense oligonucleotide sequence which has  
 CC human Bcl-2 as its target gene. The oligonucleotide is used in a method  
 CC for delivering lipid encapsulated therapeutic agents (i.e antisense  
 CC oligonucleotides) to mammals. The lipid capsule comprises steric barrier  
 CC lipids that prevent particle aggregation during lipid nucleic acid  
 CC formation. The method may be used for the delivery of therapeutic agents  
 CC to mammalian cells. It is especially suitable for delivering nucleic acid  
 CC molecules, and in particular antisense molecules which may be  
 CC administered to down regulate the expression of aberrant genes. The  
 CC aberrant gene may be ICAM-1, C-myc, C-myd, ras, raf, erb-B-2, PKC-alpha,  
 CC IGF-1R, EGFR, VEGF and/or VEGF-R-1. The method may be used for the  
 CC treatment of tumours, inflammatory diseases and/or infectious diseases  
 CC  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 100.0%; Score 18; DB 3; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 Db 1 TCTCCAGCGTGGCCAT 18  
 RESULT 26  
 AAA39264  
 ID AAA39264 standard; DNA; 18 BP.  
 XX  
 AC AAA39264;  
 XX  
 DT 08-SEP-2000 (first entry)  
 XX  
 DE Cpg immunostimulatory oligonucleotide #2.  
 XX  
 KW Cpg; immunostimulatory; adjuvant; vaccine; metal salt; antiviral;  
 KW antibacterial; antiprotzoal; antimalarial; anti-allergic; anticancer;  
 KW immune response; infection; allergy; cancer; ss.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200023105-A2.  
 XX  
 PD 27-APR-2000.  
 XX  
 PF 08-OCT-1999; 99WO-EP007764.  
 XX  
 PR 16-OCT-1998; 98GB-00022703.  
 PR 16-OCT-1998; 98GB-00022709.  
 PR 16-OCT-1998; 98GB-00022712.  
 XX  
 PA (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.  
 XX  
 PI Garcon N;  
 XX  
 DR WPI; 2000-339525/29.  
 XX  
 PT Adjuvant composition comprising immunostimulant, useful for preparing  
 PT vaccines, deposited on metal salt particle that contains no antigen,  
 PT which is present on separate particles.

XX Disclosure; Page 6; 37pp; English.  
PS  
XX The present invention describes an adjuvant composition (A) comprising an  
CC immunostimulant (I) absorbed on a metallic salt particle (II) that is  
CC practically free of antigen (Ag). Also described are: (1) preparation of  
CC a vaccine by mixing (A) with Ag; (2) vaccine comprising two major  
CC populations of complexes, one comprising (A) and the other Ag adsorbed on  
CC (II); and (3) kit comprising, in separate containers, monophosphoryl  
CC lipid A (MWp) adsorbed on metal salt and Ag adsorbed on metal salt. (A)  
CC has antiviral, antibacterial, antiprotoczoal, antimalarial, anti-allergic  
CC and anticancer activities, and can be used to induce a specific immune  
CC response. (A) are used in preparation of vaccines for treatment or  
CC prevention of a wide range of viral, bacterial and protozoal infections,  
CC also allergy and cancers. By adsorbing (I) and Ag on separate particles,  
CC vaccines (including those containing many Ag) can be produced simply by  
CC mixing, rather than by sequential adsorption of many components on to the  
CC same particles (which is time-consuming, expensive and difficult to  
CC control). The components may be tested individually and failure of any  
CC one component does not require rejection of an entire batch of vaccine.  
CC The new vaccines are as effective as those prepared conventionally. The  
CC present sequence represents a Cpg immunostimulatory oligonucleotide which  
CC is used in the exemplification of the present invention  
SQ  
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
AAZ47680  
ID AAZ47680 standard; DNA; 18 BP.  
XX  
XX AAZ47680;  
AC  
XX  
XX 01-MAR-2000 (first entry)  
DT  
XX  
XX Parasitic infection preventing exemplary oligonucleotide SEQ ID NO:89.  
DE  
XX  
XX Immune system; immunostimulatory; parasitic infection; parasite;  
KM Cpg oligonucleotide; antigen presenting cell; natural killer cell;  
KM granulocyte; malaria; helminth disease; tick; mite; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO956755-A1.  
PN  
XX  
XX 11-NOV-1999.  
PD  
XX  
XX 06-MAY-1999; 99WO-US009863.  
PF  
XX  
XX 06-MAY-1998; 98US-0084512P.  
PR  
XX  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA (OTTA-) OTTAWA CIVIC LOEB RES INST.  
PA (USNA ) US SEC OF NAVY.  
XX  
XX Gramzinski RA, Krieg AM, Davis HL, Hoffman SL;  
PI  
XX  
XX WPI; 2000-062123/05.  
DR  
XX  
XX Treating and preventing parasitic infections using Cpg oligonucleotides.  
PT  
XX  
XX Disclosure; Page 21; 74pp; English.  
PS  
XX  
XX The present invention describes a method for treating and preventing  
CC parasitic infection by administration of umethylated Cpg

CC oligonucleotides. The Cpg oligonucleotides are able to stimulate the  
CC innate immune system via the activation of immune cells, such as antigen  
CC presenting cells, natural killer cells and granulocytes. The Cpg  
CC oligonucleotides and the method can be used to treat and prevent  
CC parasitic diseases, such as malaria, helminth diseases, tick and mites in  
CC humans, animals and poultry. The oligonucleotides may be administered in  
CC conjunction with parasiticides or other therapeutic compounds after an  
CC organism has been diagnosed to be infected with parasites. Diseases which  
CC can be treated or prevented include those caused by Plasmodium  
CC falciparum, P. ovale, P. malariae, P. vivax, P. knowlesi, Babesia  
CC microti, B. divergens, Trypanosoma cruzi, T. gambiense, T. rhodesiense,  
CC Schistosoma mansoni, Toxoplasma gondii, Trichinella spiralis, Leishmania  
CC major, L. donovani, L. braziliensis, and L. tropica. The parasite is  
CC especially capable of causing malaria. The present sequence represents a  
CC parasitic infection preventing exemplary oligonucleotide sequence from  
CC the present invention  
SQ  
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
AAZ47643  
ID AAZ47643 standard; DNA; 18 BP.  
XX  
XX AAZ47643;  
AC  
XX  
XX 01-MAR-2000 (first entry)  
DT  
XX  
XX Parasitic infection preventing exemplary oligonucleotide SEQ ID NO:49.  
DE  
XX  
XX Immune system; immunostimulatory; parasitic infection; parasite;  
KM Cpg oligonucleotide; antigen presenting cell; natural killer cell;  
KM granulocyte; malaria; helminth disease; tick; mite; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO956755-A1.  
PN  
XX  
XX 11-NOV-1999.  
PD  
XX  
XX 06-MAY-1999; 99WO-US009863.  
PF  
XX  
XX 06-MAY-1998; 98US-0084512P.  
PR  
XX  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA (OTTA-) OTTAWA CIVIC LOEB RES INST.  
PA (USNA ) US SEC OF NAVY.  
XX  
XX Gramzinski RA, Krieg AM, Davis HL, Hoffman SL;  
PI  
XX  
XX WPI; 2000-062123/05.  
DR  
XX  
XX Treating and preventing parasitic infections using Cpg oligonucleotides.  
PT  
XX  
XX Disclosure; Page 20; 74pp; English.  
PS  
XX  
XX The present invention describes a method for treating and preventing  
CC parasitic infection by administration of umethylated Cpg  
CC oligonucleotides. The Cpg oligonucleotides are able to stimulate the  
CC innate immune system via the activation of immune cells, such as antigen  
CC presenting cells, natural killer cells and granulocytes. The Cpg  
CC oligonucleotides and the method can be used to treat and prevent  
CC parasitic diseases, such as malaria, helminth diseases, tick and mites in  
CC humans, animals and poultry. The oligonucleotides may be administered in  
CC conjunction with parasiticides or other therapeutic compounds after an

CC organism has been diagnosed to be infected with parasites. Diseases which  
CC can be treated or prevented include those caused by Plasmodium  
CC falciparum, P. ovale, P. malariae, P. vivax, P. knowlesi, Babesia  
CC microti, B. divergens, Trypanosoma cruzi, T. gambiense, T. rhodesiense,  
CC Schistosoma mansoni, Toxoplasma gondii, Trichinella spiralis, Leishmania  
CC major, L. donovani, L. braziliensis, and L. tropica. The parasite is  
CC especially capable of causing malaria. The present sequence represents a  
CC paratitic infection preventing exemplary oligonucleotide sequence from  
CC the present invention  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 29  
AAA91620  
ID AAA91620 standard; DNA; 18 BP.

AC AAA91620;  
XX  
DT 20-DEC-2000 (first entry)

DE Human Bcl-2 antisense oligonucleotide.

KM Human; Bcl-2 antisense oligonucleotide; ribonucleotide reductase;  
KM R1 protein; R2 protein; tumour cell proliferation inhibition; cancer;  
KM cytostatic; ss.

OS Homo sapiens.  
OS Synthetic.

PN WO200047733-A1.

PD 17-AUG-2000.

PF 09-FEB-2000; 2000WO-CA000120.

PR 11-FEB-1999; 99US-00249730.

PA (GENE-) GENESENSE TECHNOLOGIES INC.

PI Wright JA, Young AH;

PS WPI; 2000-558216/51.

PT New antisense oligonucleotide, AS-I-618-20, is useful for inhibiting  
PT tumour cell growth.

XX Example 13; Page 105; 137pp; English.

CC The present sequence is an antisense oligonucleotide directed against Bcl  
CC -2. Antisense oligonucleotides directed against a number of tumour-  
CC associated genes were administered to mice injected with human colon  
CC carcinoma cells, human melanoma cells or human lung cancer cells. The  
CC tumour was removed 14 days after treatment and its weight was measured.  
CC This was performed as an example of a method for modulating cell  
CC proliferation. Antisense oligonucleotides were also made that were  
CC directed against the R1 or R2 component of mammalian ribonucleotide  
CC reductase. Ribonucleotide reductase catalyses the conversion of  
CC ribonucleotides to their corresponding deoxyribonucleotides and thus  
CC plays an important role in DNA synthesis and cell proliferation.  
CC Regulation of ribonucleotide reductase is altered in cultured malignant  
CC cells and increased levels of R2 protein and R2 mRNA have been found in  
CC pre-malignant and malignant tissues as compared to normal control tissue  
CC samples. Antisense sequence are therefore useful for inhibiting  
CC tumourigenicity of neoplastic cells and inhibiting metastasis of tumour

CC cells. They are also useful for increasing sensitivity of neoplastic  
CC cells to chemotherapeutic drugs, thus allowing chemotherapeutic  
CC treatments to be used in patients who have become resistant or less  
CC sensitive to chemotherapy  
XX

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 30  
AAC60278  
ID AAC60278 standard; DNA; 18 BP.

AC AAC60278;

DT 14-FEB-2001 (first entry)

DE Immunostimulatory oligonucleotide #2.

KM Immunostimulatory; oligonucleotide; cancer; allergy; Alzheimer's disease;  
KM atherosclerosis; viral; bacterial; parasitic; infection; ss.

OS Homo sapiens.

PN WO200062800-A2.

PD 26-OCT-2000.

PF 04-APR-2000; 2000WO-EP002920.

PR 19-APR-1999; 99GB-00008885.

PR 29-APR-1999; 99US-00301829.

PA (SMK) SMITHKLINE BEECHAM BIOLOGICALS.

PI Friede M, Garcon N, Hermand P;

PS WPI; 2000-687101/67.

PT Adjuvant composition comprising saponin and immunostimulatory  
PT oligonucleotide CPG, useful for producing vaccine formulations for  
PT prophylaxis and treatment of cancers, allergy and Alzheimer's disease.

XX Claim 5; Page 4; 52pp; English.

CC The present invention relates to an adjuvant composition comprising a  
CC saponin and an immunostimulatory oligonucleotide. A vaccine composition  
CC containing the adjuvant is useful for inducing an immune response in an  
CC individual and for preventing or treating disease. Diseases include  
CC cancer; allergy; Alzheimer's disease and atherosclerosis. The vaccine is  
CC also useful for prophylaxis and treatment of viral, bacterial and  
CC parasitic infections. The present sequence is an oligonucleotide of the  
CC invention  
XX

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 3; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
DB 1 TCTCCAGCGTGGCCAT 18

RESULT 31

AA65037  
 ID AAC65037 standard; DNA; 18 BP.  
 XX  
 AC AAC65037;  
 XX  
 DT 12-FEB-2001 (first entry)  
 XX  
 DE Bcl2 antisense sequence SEQ ID NO: 20.  
 XX  
 XX Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;  
 KW protein kinase C; PKC; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200061810-A1.  
 XX  
 PD 19-OCT-2000.  
 XX  
 PF 07-APR-2000; 2000WO-US009293.  
 XX  
 PR 08-APR-1999; 99US-0128377P.  
 XX  
 PA (OAS1-) OASIS BIOSCIENCES INC.  
 XX  
 PI Brown BD, Riley TA;  
 XX  
 DR WPI; 2000-679502/66.  
 XX  
 PT Antisense oligonucleotides containing degenerate and/or universal bases,  
 PT and modified backbone linkages is useful to target therapeutic genes,  
 PT preferably anti-apoptosis or chemoresistance genes.  
 XX  
 PS Example 4; Page 11; 32pp; English.  
 XX  
 CC The present invention is concerned with antisense oligonucleotides  
 CC containing a number of degenerate bases and with a modified backbone  
 CC which can be used to direct cleavage of target RNA molecules. The use of  
 CC degenerate bases reduces the risk of immune activation following  
 CC injection into animals, which causes deleterious side effects associated  
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-  
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to  
 CC demonstrate the effects of the sequences of the invention  
 CC  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 100.0%; Score 18; DB 3; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 |||||  
 1 TCTCCAGCGTGGCCAT 18  
 DB  
 RESULT 32  
 ID AAC64137  
 ID AAC64137 standard; DNA; 18 BP.  
 XX  
 AC AAC64137;  
 XX  
 DT 19-FEB-2001 (first entry)  
 XX  
 DE Immunostimulatory Cpg oligonucleotide WD0002 used in an RSV vaccine.  
 XX  
 KW Immunostimulatory oligonucleotide; Cpg oligonucleotide;  
 KW respiratory syncytial virus; RSV; vaccine; phosphorothioate;  
 KW umethylated; adjuvant; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200062802-A2.  
 XX  
 PD 26-OCT-2000.

XX  
 PF 17-APR-2000; 2000WO-EP003516.  
 XX  
 PR 20-APR-1999; 99GB-00009077.  
 PR 28-JUN-1999; 99GB-00015106.  
 XX  
 PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.  
 XX  
 PI Deschamps M;  
 XX  
 DR WPI; 2000-679550/66.  
 XX  
 PT Novel vaccine formulation comprising a respiratory syncytial virus (RSV)  
 PT antigen and an immunostimulatory Cpg oligonucleotide useful for treating  
 PT RSV infections mutations.  
 XX  
 PS Claim 9; Page 26; 34pp; English.  
 XX  
 CC The invention relates to a novel vaccine formulation comprising a  
 CC respiratory syncytial virus (RSV) antigen and an immunostimulatory Cpg  
 CC oligonucleotide. The Cpg motifs of the immunostimulatory oligonucleotide  
 CC are unmethylated, and the backbone of the oligonucleotide is preferably  
 CC all-phosphorothioate. The RSV antigen used may be F (fusion) protein, G  
 CC (attachment) protein, an Fg fusion protein, an immunogenic derivative of  
 CC any of these proteins, or inactivated RSV. RSV causes lower respiratory  
 CC tract illness in humans, particularly in children and the elderly. The  
 CC RSV vaccine of the invention is used for preventing or ameliorating RSV  
 CC infection in a patient. The present sequence represents an  
 CC immunostimulatory Cpg oligonucleotide which may be used in the RSV  
 CC vaccine of the invention  
 XX  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 100.0%; Score 18; DB 3; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 |||||  
 1 TCTCCAGCGTGGCCAT 18  
 DB

RESULT 33  
 ID AAH20395  
 ID AAH20395 standard; DNA; 18 BP.  
 XX  
 AC AAH20395;  
 XX  
 DT 03-AUG-2001 (first entry)  
 XX  
 DE Cpg motif containing oligonucleotide SEQ ID #6.  
 XX  
 KW Immune system stimulator; Cpg motif; Cpg receptor; Cpg-R; antibacterial;  
 KW immune response; vaccine adjuvant; tumour immunotherapy; allergy;  
 KW anti-inflammatory; cystic fibrosis; sepsis; heart disease; chlamydia;  
 KW inflammatory bowel disease; arthritis; multiple sclerosis; ss.  
 XX  
 OS Unidentified.  
 XX  
 FT Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "phosphorothioate internucleoside linkages"  
 XX  
 PN WO200132877-A2.  
 XX  
 PD 10-MAY-2001.  
 XX  
 PF 01-NOV-2000; 2000WO-US041735.  
 XX  
 PR 02-NOV-1999; 99US-0163157P.  
 PR 24-NOV-1999; 99US-0167389P.

XX (CHIR ) CHIRON CORP.  
PA Mackichan ML;  
XX WPI; 2001-343486/36.  
XX  
XX Novel Cpg receptor and nucleic acid molecule encoding the receptor, for  
PT modulating immune response and for identifying compounds of therapeutic  
PT use which bind and/or modulate the activity of the receptor.  
XX  
XX Example 1; Page 14; 41pp; English.  
XX  
XX Unmethyalted CG dinucleotide sequences are commonly found in bacterial  
CC DNA, and have been found to stimulate the innate immune system. Natural  
CC killer and T cells are activated by exposure to oligonucleotides  
CC containing Cpg motifs. Oligonucleotides containing Cpg motifs can be used  
CC as adjuvants in vaccines. The present invention relates to a Cpg  
CC receptor. The Cpg receptor contains a Toll homology domain (THD). The  
CC Toll receptor family are associated with responses to pathogens. Cpg  
CC oligonucleotides may act as stimulators of various immune responses. The  
CC Cpg receptor or cells expressing the receptor are useful for identifying  
CC a compound which binds to or modulates an activity of the Cpg receptor.  
CC The compounds are useful in e.g. vaccine adjuvants promoting cell-  
CC mediated immune responses, antibacterials, (e.g. protection from listeria  
CC infection), tumour immunotherapy, allergy treatment, (e.g. suppressing  
CC IgE in human PWM, shifting from Th2 to Th1) and as anti-inflammatory  
CC agents (e.g. for use in cystic fibrosis, sepsis, heart disease,  
CC chlamydia, inflammatory bowel disease, arthritis and multiple sclerosis).  
CC The present sequence represents a Cpg motif containing oligonucleotide  
CC used in examples demonstrating that Cpg oligonucleotides can activate the  
CC MAPK pathways and NF-kappaB

XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 100.0%; Score 18; DB 4; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 34  
AAH50615  
ID AAH50615 standard; DNA; 18 BP.  
XX  
AC AAH50615;  
XX  
DT 22-AUG-2001 (first entry)  
XX  
XX Natural killer cell lytic activity iducing oligonucleotide SEQ ID NO:45.  
DE  
XX Immunostimulatory; inducing; natural killer cell; lytic activity;  
KW unmethyalted Cpg dinucleotide; immune response; B cell proliferation;  
KW Th1; immune activation; interleukin 6; IL-6; interferon gamma; IFN-gamma;  
KW cytokine; ss.  
XX  
XX Synthetic.  
OS  
XX US6239116-B1.  
PN  
XX 29-MAY-2001.  
PD  
XX 30-OCT-1997; 97US-00960774.  
PF  
XX 30-OCT-1996; 96US-00738652.  
PR  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GROUP INC.  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX

PI Krieg AM, Kline JN;  
XX  
XX WPI; 2001-380456/40.  
DR  
XX  
XX Methods for inducing IL-6, interferon-gamma or IL-12, or stimulating  
PT natural killer cell lytic activity in a human, comprise administering to  
PT the subject or exposing a natural killer cell to immunostimulatory  
XX nucleic acids.  
XX  
XX Disclosure; Col 32; 74pp; English.

XX The present invention describes methods for inducing interleukin 6 (IL-  
CC 6), interferon-gamma (IFN-gamma) or IL-12, or for stimulating natural  
CC killer cell lytic activity. The methods comprise administering to the  
CC subject or exposing a natural killer cell to an immunostimulatory nucleic  
CC acid. Also described are: (1) inducing IL-6 in a subject comprising  
CC administering to the subject to induce IL-6 in the subject the  
CC immunostimulatory nucleic acid; (2) stimulating natural killer cell lytic  
CC activity comprising exposing a natural killer cell to the  
CC immunostimulatory nucleic acid to stimulate natural killer cell lytic  
CC activity; (3) inducing interferon-gamma in a subject to treat an immune  
CC system deficiency comprising administering to the subject to induce  
CC interferon-gamma production, the immunostimulatory nucleic acid; and (4)  
CC inducing IL-12 in a subject comprising administering to the subject the  
CC immunostimulatory nucleic acid. The methods are useful for inducing IL-6,  
CC interferon-gamma or IL-12, or stimulating natural killer cell lytic  
CC activity in a subject, particularly a human. The methods are particularly  
CC useful for modulating an immune response. AAH50571 to AAH50671 represent  
CC oligonucleotide sequences used in the exemplification of the present  
XX invention

XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 100.0%; Score 18; DB 4; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
| | | | | | | | | | | | | | | | | |  
Db 1 TCTCCAGCGTGGCCAT 18

RESULT 35  
AAF60923  
ID AAF60923 standard; DNA; 18 BP.  
XX  
AC AAF60923;  
XX  
DT 15-MAY-2001 (first entry)  
XX  
XX Anti-bcl oligonucleotide SEQ ID 32.  
DE  
XX Transport; membrane; cytosolic; virucide; vasotropic; dermatological;  
KW antipsoiatic; antiaesthetic; gene therapy; tumor cell; antisense;  
KW tumor therapy; drug; ss.  
XX  
XX Unidentified.  
OS  
XX DE19935302-A1.  
PN  
XX 08-FEB-2001.  
PD  
XX 28-JUL-1999; 99DE-01035302.  
PF  
XX 28-JUL-1999; 99DE-01035302.  
PR  
XX (AVER ) AVENTIS PHARMA DEUT GMBH.  
PA  
XX Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;  
PI WPI; 2001-203679/21.  
DR  
XX  
XX New substituted aryl conjugates of parent molecules, especially

PT oligonucleotides, having improved transmembrane and intracellular  
 PT transport properties, useful as medicaments or diagnostic agents.  
 XX  
 XX  
 PS Disclosure; Page 7, 28pp; German.

CC This invention describes a novel conjugate (I) which consists of (A) a  
 CC molecule to be transported and (B) at least one aryl residue of formula -  
 CC Ar-(X-C(Y)-R-1)<sub>n</sub> (II), Ar = group containing at least one aromatic ring;  
 CC X = O or N (sic); Y = O, S or NH-R-2 (sic); R-1 = optionally substituted  
 CC 1-23C alkyl (optionally containing double and/or triple bonds); R-2 =  
 CC optionally substituted 1-18C alkyl (optionally containing double and/or  
 CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or  
 CC via a chemical group, provided that the chemical group is other than CH-2  
 CC -S if the bond is via a phosphodiester linkage of (A). The invention also  
 CC describes (i) the preparation of a conjugate (I') of (A') a molecule to  
 CC be transported and (B') at least one aryl residue (not restricted to  
 CC (II)), by preparing (A') containing a reactive function at the position  
 CC at which (B) is to be bonded, preparing (B') and reacting (A') and (B');  
 CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical  
 CC group) for transporting (A) across biological membranes. The products of  
 CC the invention have cytostatic, virocidic, vasotropic, dermatological,  
 CC antiparasitic and antipathogenic activity and can be used for gene  
 CC therapy. Conjugation of (A) with (B) is useful for transporting (A)  
 CC across biological membranes or into eukaryotic or prokaryotic cells  
 CC (specifically bacterial, yeast or mammalian cells, including human cells,  
 CC particularly tumor cells). Medicaments, diagnostic agents and test kits  
 CC containing (I) are also claimed. Typically (i) are antisense  
 CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for  
 CC treating viral infections or diseases associated with integrins or cell-  
 CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or  
 CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ  
 CC hybridization. Conjugation with (B) markedly improves the cellular uptake  
 CC of (A), e.g. in tumor cells. (B) include fluorescently labeled, allowing  
 CC in which case the conjugates (I) are fluorescently labeled, allowing  
 CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)  
 CC is superior to that obtained using other conjugated groups related to  
 CC (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within  
 CC the scope of (B)) have superior uptake to corresponding fluorescein  
 CC conjugates  
 XX

SO Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 4; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
 |||||  
 DB 1 TCTCCAGCGTGGCCAT 18

RESULT 36  
 ID AAH19305 standard; DNA; 18 BP.

XX AAH19305;

XX 13-JUL-2001 (first entry)

XX Cpg oligonucleotide #6.

XX Immunostimulant; anti-allergic; cytostatic; antipathogenic; vaccine;  
 KW gene therapy; Cpg; immune system deficiency; tumour; cancer; infection;  
 KW leukaemia; ss.

XX Synthetic.

XX US6207646-B1.

XX 27-MAR-2001.

XX 30-OCT-1996; 96US-00738652.

PR 15-JUL-1994; 94US-00276358.  
 PR 07-FEB-1995; 95US-00386063.  
 XX

XX (IOWA ) UNIV IOWA RES FOUND.  
 PA (COLE-) COLEY PHARM GROUP INC.  
 PA (USSR ) US DEEP HEALTH & HUMAN SERVICES.

XX Krieg AM, Kline J, Kliman D, Steinberg AD;  
 DR WPI; 2001-280761/29.

PT Compositions comprising immunostimulatory molecules which comprise  
 PT unethylated Cpg dinucleotides useful for ameliorating immune system  
 PT deficiency, treating leukemia and desensitizing subject against allergic  
 XX response.

PS Disclosure; Col 29-30; 55pp; English.

XX The present invention relates to a composition comprising an isolated  
 CC immunostimulatory nucleic acid which comprises unethylated cytosine-  
 CC guanine (Cpg) dinucleotides and an antigen in a carrier. The present  
 CC sequence is an oligonucleotide, which was used in the present invention.  
 CC The immunostimulatory nucleic acids are useful for ameliorating an immune  
 CC system deficiency (the presence of tumour, cancer or infectious agent) in  
 CC a subject. The immunostimulatory nucleic acids are also useful for  
 CC desensitizing a subject against the occurrence of an allergic reaction in  
 CC response to contact with a particular allergen. The immunostimulatory  
 CC nucleic acids are also useful for vaccination and for treating leukaemia  
 CC in a subject on administration prior to or in conjunction with a  
 CC chemotherapy, so that the subject's leukaemia cells are more sensitive to  
 CC chemotherapy. The compositions are useful for inducing an antigen  
 CC specific immune response in the subject. The compositions can be also  
 CC used to treat or prevent the symptoms of asthma  
 XX

SO Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 18; DB 4; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
 |||||  
 DB 1 TCTCCAGCGTGGCCAT 18

RESULT 37

AA98832  
 ID AAF98832 standard; DNA; 18 BP.

XX AAF98832;

XX 11-JUN-2001 (first entry)

XX Cpg immunostimulatory nucleic acid SEQ ID NO: 110.

XX Immunostimulatory nucleic acid; ISNA; human; interferon alpha; IFN-alpha;  
 KW viral infection; phosphorothioate backbone; palindrome; cancer; ds.

XX Synthetic.

XX WO200122990-A2.

XX 05-APR-2001.

XX 27-SEP-2000; 2000WO-US026527.

XX 27-SEP-1999; 99US-0156147P.

XX (COLE-) COLEY PHARM GROUP INC.  
 PA (IOWA ) UNIV IOWA RES FOUND.

XX Hartmann G, Bratzler RL, Krieg A;



DR WPI; 2001-290487/30.  
XX Improving the efficacy of treatments involving the administration of  
PT interferon-alpha by co-administering an isolated immunostimulatory  
PT nucleic acid.  
XX  
XX Disclosure; Page 22; 168pp; English.  
PS  
CC The present invention describes an improvement to a method requiring the  
CC administration of interferon alpha (IFN-alpha), involving administering  
CC an immunostimulatory nucleic acid (ISNA). The sequences of a number of  
CC such nucleic acids are also provided. These may comprise oligonucleotides  
CC with phosphorothioate backbones, palindromes, or G-rich sequences. The  
CC sequences of the invention are useful in the treatment of proliferative  
CC diseases, such as cancers, and viral infections. The present sequence is  
CC an example of an immunostimulatory oligonucleotide  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 100.0%; Score 18; DB 4; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
XX  
RESULT 38  
AAFS9502  
ID AAF59502 standard; DNA; 18 BP.  
XX  
AC AAF59502;  
XX  
DT 24-APR-2001 (first entry)  
XX  
DE Immunostimulatory Cpg oligonucleotide WD1002 for use in an HIV vaccine.  
XX  
XX Immunostimulatory Cpg oligonucleotide; adjuvant; HIV antigen;  
KM HIV infection; vaccine; prophylaxis; treatment; ss.  
XX  
OS Synthetic.  
XX  
PN WO200100232-A2.  
XX  
PD 04-JAN-2001.  
XX  
PF 28-JUN-2000; 2000WO-EP005998.  
XX  
PR 29-JUN-1999; 99GB-00015205.  
PR 31-JAN-2000; 2000GB-00002200.  
XX  
XX (SMK ) SMITHKLINE BEECHAM BIOLOGICALS.  
XX  
PI Garcon N, Vose G;  
XX  
DR WPI; 2001-122974/13.  
XX  
PT New vaccine formulation comprising human immunodeficiency virus (HIV)  
PT antigen and immunostimulatory Cpg oligonucleotide, useful for preventing  
PT and treating HIV infections in a patient.  
XX  
PS Claim 10; Page 17; 23pp; English.  
XX  
XX The invention relates to an HIV vaccine comprising an HIV antigen and an  
CC immunostimulatory oligonucleotide (AAF59501-AAF59508). With the exception  
CC of oligonucleotide WD1005 (AAF59505), the immunostimulatory  
CC oligonucleotides contain at least one unmethylated Cpg motif. In  
CC preferred embodiments the internucleotide linkage is phosphorodichioate,  
CC although phosphodiester and other internucleotide bonds, or mixtures of  
CC linkages are within the scope of the invention. The HIV antigen may be  
CC selected from gp160, gp120, Nef, Tat, and Nef or Tat derivatives or  
CC fusion proteins. The vaccine is used for the prophylaxis or treatment of

CC HIV infection in a patient. The present sequence represents a  
CC specifically claimed immunostimulatory Cpg oligonucleotide for use in the  
CC vaccine of the invention  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 100.0%; Score 18; DB 4; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGCCAT 18  
Db 1 TCTCCAGCGTGGCCAT 18  
XX  
RESULT 39  
AAFS9530  
ID AAF98930 standard; DNA; 18 BP.  
XX  
AC AAF98930;  
XX  
DT 12-JUN-2001 (first entry)  
XX  
DE Immunostimulatory nucleic acid #46.  
XX  
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KM immunostimulatory; tumour; viral infection; bacterial infection;  
KM fungal infection; parasitic infection; cancer; asthma;  
KM infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX  
OS Synthetic.  
XX  
PN WO200122972-A2.  
XX  
PD 05-APR-2001.  
XX  
PF 25-SEP-2000; 2000WO-US026383.  
XX  
PR 25-SEP-1999; 99US-0156113P.  
PR 27-SEP-1999; 99US-0156135P.  
PR 23-AUG-2000; 2000US-0227436P.  
XX  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
XX Krieg AM, Schetter C, Vollmer J;  
XX  
PI WPI; 2001-273485/28.  
XX  
DR  
XX  
PT Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
XX  
PS Disclosure; Page 39; 338pp; English.  
XX  
XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate backbone cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 100.0%; Score 18; DB 4; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;



XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
 KM immunostimulatory; tumour; viral infection; bacterial infection;  
 KM fungal infection; parasitic infection; cancer; asthma;  
 KM infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
 XX Synthetic.  
 OS  
 PN WO200122972-A2.  
 PD 05-APR-2001.  
 PF 25-SEP-2000; 2000MO-US026383.  
 PR 25-SEP-1999; 99US-0156113P.  
 PR 27-SEP-1999; 99US-0156135P.  
 PR 23-AUG-2000; 2000US-0227436P.  
 XX  
 PA (IOWA ) UNIV IOWA RES FOUND.  
 XX (COLE-) COLEY PHARM GMBH.  
 PI Krieg AM, Schetter C, Vollmer J;  
 DR WPI; 2001-273485/28.  
 XX  
 PT Vaccinating against tumors, infectious diseases, allergies and asthma  
 PT using immunostimulatory Py-rich and TG nucleic acids.  
 PS Example 12; Page 38; 338pp; English.  
 XX  
 CC The present invention relates to a method for stimulating an immune  
 CC response. The method comprises administering an immunostimulatory nucleic  
 CC acid to a non-rodent subject in sufficient quantity to stimulate an  
 CC immune response. The present sequence is one such immunostimulatory  
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
 CC haemophilus, campylobacter, clostridium, escherichia coli and/or  
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
 CC also useful for preventing cancer, asthma, infectious disease, allergy or  
 CC immune deficiency. The present sequence can also be used to redirect a  
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
 CC present sequence may have a phosphorothioate backbone  
 CC  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 100.0%; Score 18; DB 4; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 DB 1 TCTCCAGCGTGGCCAT 18  
 XX  
 RESULT 43  
 ID AAA92362 standard; DNA; 18 BP.  
 XX AAA92362;  
 AC 12-JAN-2001 (first entry)  
 DT  
 XX CG motif and CFA containing oligonucleotide SEQ ID NO:4.  
 DE  
 XX CG motif: complete Freund's adjuvant; phosphorothioate; immunogenic;  
 KM Neisseria antigen; Neisseria meningitidis; Neisseria gonorrhoeae;  
 KM bactericidal; antibacterial; vaccine; immunostimulatory; infection;  
 KM immune response; ss.  
 XX Neisseria sp.  
 OS

FH Key Location/Qualifiers  
 FT modified\_base 1..18  
 FT /+tag= a  
 FT /note= "preferably contains at least one phosphorothioate  
 FT bond"  
 XX  
 XX WO200050075-A2.  
 PN  
 PD 31-AUG-2000.  
 PF 09-FEB-2000; 2000MO-IB000176.  
 PR 26-FEB-1999; 99US-0121792P.  
 XX  
 PA (CHIR-) CHIRON SPA.  
 XX  
 PI Grandi G, Rappuoli R, Giuliani MM, Pizza M;  
 DR WPI; 2001-015529/02.  
 XX  
 PT Immunogenic composition useful for stimulating an immune response in a  
 PT mammal against Neisseria infection, comprises Neisseria antigen and an  
 PT adjuvant composition comprising an oligonucleotide with a CG motif.  
 PS Claim 19; Page 9; 39pp; English.  
 XX  
 CC The present invention describes an immunogenic composition (I) comprising  
 CC a Neisseria antigen and an adjuvant composition comprising an  
 CC oligonucleotide comprising at least 1 CG motif. Also described is an  
 CC adjuvant composition (II) comprising an oligonucleotide which comprises  
 CC at least 1 CG motif and a complete Freund's adjuvant (CFA), where the  
 CC oligonucleotide preferably comprises at least one phosphorothioate bond.  
 CC AAA92359 to AAA92385 represent specifically claimed oligonucleotides of  
 CC the present invention. (I) is useful for stimulating an immune response  
 CC in a mammal, preferably a human, against Neisseria infection, preferably  
 CC Neisseria meningitidis infection and in the manufacture of a medicament  
 CC for inducing a protective immune response in a mammal  
 CC  
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 100.0%; Score 18; DB 4; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 TCTCCAGCGTGGCCAT 18  
 DB 1 TCTCCAGCGTGGCCAT 18  
 XX  
 RESULT 44  
 ID AAS08980 standard; DNA; 18 BP.  
 XX AAS08980;  
 AC 24-OCT-2001 (first entry)  
 DT  
 XX Cpg-containing oligonucleotide sequence 1758.  
 DE  
 XX Cpg motif; saponin; innate immune response; natural killer cell response;  
 KM viral disease; hepatitis; feline leukaemia virus; influenza; adenovirus;  
 KM herpes simplex virus; HSV; papilloma virus; human immunodeficiency virus;  
 KM HIV; bacterial disease; mycoplasma; legionella; anthrax; diptheria; ds;  
 KM Lyme disease; tuberculosis; protozoal disease; leishmania; trypanosoma;  
 KM parasitic disease; chlamydia; rickettsia; fibrosarcoma; adenocarcinoma;  
 KM retinoblastoma; melanoma; leukaemia; leukaemia; Ewing's tumour; Wilms' tumour;  
 KM cancer.  
 XX Homo sapiens.  
 OS  
 PN WO200151083-A2.  
 XX 19-JUL-2001.  
 PD

XX  
PF 12-JAN-2001; 2001WO-US001046.  
XX  
PR 13-JAN-2000; 2000US-0175840P.  
PR 01-MAY-2000; 2000US-0200853P.  
PR 06-AUG-2000; 2000US-00369941.  
XX  
PA (AQUILA -) AQUILA BIOPHARMACEUTICALS INC.  
XX  
PI Kensil CR;  
XX  
DR WPI; 2001-451816/48.  
XX  
PT Composition for enhancing innate immune response and treating infections  
PT and cancer comprises a saponin and an oligonucleotide comprising at least  
PT one unmethylated CpG dinucleotide.  
XX  
PS Disclosure; Page 5; 49pp; English.  
XX  
CC The sequence represents a CpG motif. Compositions comprising a saponin  
CC and a CpG motif containing at least one unmethylated CpG (cytosine-  
CC guanine) dinucleotide can be administered to humans and other mammals to  
CC stimulate an innate immune response and enhance a natural killer cell  
CC response. They are therefore useful for treating and preventing viral  
CC diseases such as those caused by hepatitis, feline leukaemia virus,  
CC influenza, adenovirus, herpes simplex virus (HSV), papilloma virus and  
CC human immunodeficiency virus (HIV); bacterial diseases such as those  
CC caused by mycoplasma, legionella, anthrax, diphtheria, Lyme disease and  
CC tuberculosis; protozoal diseases such as those caused by leishmania and  
CC trypanosoma; parasitic diseases such as those caused by chlamydia and  
CC rickettsia; and cancers such as fibrosarcoma, adenocarcinoma,  
CC retinoblastoma, melanoma, leukaemia, Ewing's tumour and Wilm's tumour  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 100.0%; Score 18; DB 5; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 TCTCCAGCGTGGCCAT 18  
DB 1 TCTCCAGCGTGGCCAT 18  
XX  
RESULT 45  
AAF27748  
ID AAF27748 standard; DNA; 18 BP.  
XX  
AC AAF27748;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE P. falciparum vaccine Cpg oligonucleotide WD1002.  
XX  
KM Plasmodium falciparum; malaria; Cpg oligonucleotide; vaccine; sporozoite;  
KM ds.  
XX  
OS Unidentified.  
XX  
PN WO200100231-A2.  
XX  
PD 04-JAN-2001.  
XX  
PF 23-JUN-2000; 2000WO-EP005841.  
XX  
PR 29-JUN-1999; 99GB-00015204.  
XX  
PA (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.  
XX  
PI Cohen J, Garcon N, Voss G;  
XX  
DR WPI; 2001-112392/12.  
XX

PT New vaccine formulation, useful for preventing and treating plasmodium  
PT infection in a patient, comprises malaria antigen and immunostimulatory  
PT Cpg oligonucleotide.  
XX  
PS Claim 8; Page 16; 22pp; English.  
XX  
CC The present invention describes a vaccine comprising a malaria antigen  
CC and an immunostimulatory Cpg oligonucleotide. This is useful in the  
CC prevention and treatment of malaria caused by Plasmodium falciparum  
CC infection  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 100.0%; Score 18; DB 5; Length 18;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 TCTCCAGCGTGGCCAT 18  
DB 1 TCTCCAGCGTGGCCAT 18  
XX  
RESULT 46  
ABQ88341  
ID ABQ88341 standard; DNA; 18 BP.  
XX  
AC ABQ88341;  
XX  
DT 27-JUN-2003 (first entry)  
XX  
DE Immunostimulatory oligonucleotide #1.  
XX  
KM Immunostimulatory; antiviral; antibacterial; antiparasitic; cytostatic;  
KM antiallergic; antiasthmatic; respiratory; cancer; autoimmune disorder;  
KM autoimmune asthma; airway inflammation; allergy; oligonucleotide; ss.  
XX  
OS Synthetic.  
XX  
PN WO20026757-A2.  
XX  
PD 04-APR-2002.  
XX  
PF 26-SEP-2001; 2001WO-US030137.  
XX  
PR 26-SEP-2000; 2000US-0235452P.  
PR 26-SEP-2000; 2000US-0235453P.  
PR 15-NOV-2000; 2000US-00712898.  
XX  
PA (HYBR-) HYBRIDON INC.  
XX  
PI Kandimala ER, Zhao Q, Yu D, Agrawal S;  
XX  
DR WPI; 2002-527359/56.  
XX  
PT Method for modulating the immunostimulatory effect of an  
PT immunostimulatory oligonucleotide compound, and new immunostimulatory  
PT oligonucleotide compounds.  
XX  
PS Disclosure; Fig 21A; 94pp; English.  
XX  
CC The invention relates to positional chemical modifications introduced in  
CC immunostimulatory oligonucleotide compounds that affect their  
CC immunostimulatory capabilities. The activity of oligonucleotides of the  
CC invention may be described as, immunostimulatory, antiviral,  
CC antibacterial, antiparasitic, cytostatic, antiallergic, antiasthmatic,  
CC and respiratory. Oligonucleotides of the invention may be used for  
CC treating a disease caused by a pathogen, e.g. a virus, parasite or  
CC bacterium, cancer, autoimmune disorders (e.g. autoimmune asthma), airway  
CC inflammation or allergy. The oligonucleotide may be administered in  
CC combination with an antibiotic, antigen, allergen, vaccine, antibody,  
CC cytotoxic agent, antisense oligonucleotide, gene therapy vector, DNA  
CC vaccine or adjuvant, particularly with a chemotherapeutic compound in the  
CC treatment of cancer. The sequences given in records ABQ88243-ABQ88353



```

QY      1 TCTCCAGCGTGGCCAT 18
      |||||
      1 TCTCCAGCGTGGCCAT 18
Db
RESULT 49
ABL01615
ID      ABL01615 standard; DNA; 18 BP.
XX
AC      ABL01615;
XX
DT      15-MAR-2002 (first entry)
XX
DE      bcl-2 targeted antisense peptide nucleic acid SEQ ID NO: 21.
XX
KW      Peptide nucleic acid; PNA; cytostatic; virucide; dermatological;
KW      antileukemic; overexpression; viral infection; vitiligo; antisense;
KW      pigmentation disorder; asthma; polyamide backbone; ss.
XX
OS      Unidentified.
XX
FH      Key
FH      modified_base
FT      1. .18
FT      /tag= a
FT      /note= "This sequence is a peptide nucleic acid, i.e. it
FT      contains a polyamide backbone instead of a deoxyribose
FT      backbone"
FT      modified_base
FT      1
FT      /tag= b
FT      /mod_base= OTHER
FT      /note= "linked to one of the peptides shown in ABB04517
FT      and ABB04518 to form a PNA-peptide conjugate"
XX
PN      WO200179216-A2.
XX
PD      25-OCT-2001.
XX
PF      07-APR-2001; 2001WO-EP004030.
XX
PR      18-APR-2000; 2000DE-01019135.
XX
PA      (AVET ) AVENTIS PHARMA DEUT GMBH.
XX
PI      Uhlmann E, Breipohl G, Will DW;
XX
DR      WPI; 2002-075055/10.
XX
PT      New peptide nucleic acid derivatives, useful e.g. for tumor treatment and
PT      diagnosis, contain terminal, deprotonizable phosphoryl groups for e.g.
PT      improved solubility.
XX
PS      Disclosure; Page 20; 93pp; German.
XX
CC      The present invention relates to peptide nucleic acid (PNA) derivatives
CC      having at the C-, and optionally N-, terminus one or more phosphoryl
CC      groups, at least one of which contains one or more deprotonisable groups,
CC      preferably hydroxy or mercapto. These PNAs are useful in the treatment of
CC      tumours or any disease associated with (over)expression of particular
CC      genes, including viral infections, vitiligo or other pigmentation
CC      disorders, and asthma. The present sequence is a peptide nucleic acid
CC      described in the exemplification of the invention
XX
SQ      Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match      100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 TCTCCAGCGTGGCCAT 18
      |||||
      1 TCTCCAGCGTGGCCAT 18
Db

```

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RESULT 50
AAL44699
ID      AAL44699 standard; DNA; 18 BP.
XX
AC      AAL44699;
XX
DT      03-MAY-2002 (first entry)
XX
DE      Human bcl-2 antisense oligonucleotide PT-G3139.
XX
KW      Human; visual-servoing optical microscopy; cell type; cell analysis;
KW      chemotherapy testing; bcl-2; phosphorothioate backbone; antisense; ss.
XX
OS      Homo sapiens.
XX
FH      Key
FH      modified_base
FT      1. .18
FT      /tag= a
FT      /mod_base= OTHER
FT      /note= "phosphorothioate backbone"
XX
PN      WO200194528-A2.
XX
PD      13-DEC-2001.
XX
PF      07-JUN-2001; 2001WO-US018382.
XX
PR      08-JUN-2000; 2000US-0210543P.
XX
PA      (REGC ) UNIV CALIFORNIA.
XX
PI      Callahan DE, Parvin B;
XX
DR      WPI; 2002-205819/26.
XX
PT      Coupling visual servoing microscopy technique with living cell analysis
PT      involves analyzing image data received from detection device monitoring
PT      cells, and automatically actuating stimulating devices to stimulate
PT      cells.
XX
PS      Example 7; Page 83; 11pp; English.
XX
CC      The present invention relates to a method of coupling visual servoing
CC      microscopy with living cell analysis, where cellular image data received
CC      from a detection device that monitors cells or subcellular components of
CC      the cells, is analysed, and in response to the analysed cellular image
CC      data several stimulating devices adapted to stimulate the cells or
CC      subcellular components, is automatically actuated. The method is useful
CC      for carrying out cell-type specific fluorescence assays that are useful
CC      for any types of cells, and allows detection and discrimination between
CC      normal, premalignant, malignant and/or multidrug resistant cancer cells
CC      obtained from tissue, for establishing a chemotherapeutic regimen that is
CC      tailored to an individual patient and/or individual tumour and for
CC      screening large numbers of potential drug, insecticide, herbicide and
CC      other compounds for use in medicine, agriculture and biotechnology. The
CC      present sequence is an antisense sequence aimed at the human bcl-2 coding
CC      sequence which was used in the exemplification of the invention
XX
SQ      Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match      100.0%; Score 18; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 TCTCCAGCGTGGCCAT 18
      |||||
      1 TCTCCAGCGTGGCCAT 18
Db

```

Search completed: February 17, 2006, 19:59:36  
Job time : 536 secs

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OM nucleic - nucleic search, using sw model

Run on: February 17, 2006, 19:34:41 : Search time 1945 Seconds  
(without alignments)  
432.991 Million cell updates/sec

Title: US-10-822-205-1

Perfect score: 18  
Sequence: 1 tccccgcgcgcgcacat 18

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Searched: 41078325 seqs, 23393541228 residues

Total number of hits satisfying chosen parameters: 52094

Minimum DB seq length: 0  
Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Listing first 1000 summaries

Database :

EST:\*  
1: gb\_est1:\*  
2: gb\_est2:\*  
3: gb\_est3:\*  
4: gb\_est4:\*  
5: gb\_est5:\*  
6: gb\_est6:\*  
7: gb\_est7:\*  
8: gb\_est8:\*  
9: gb\_est9:\*  
10: gb\_est10:\*  
11: gb\_est11:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	13.8	76.7	30	11	TA341A10Q
2	11.8	65.6	21	9	AZ305158 1M0005K11
3	11.4	63.3	25	1	AA961707 or40e08.s
4	10.6	58.9	20	7	CO779101 BL005C.F0
5	10.6	58.9	24	11	TA5F09P
6	10.6	58.9	26	1	AU255658 AU255658
7	10.4	57.8	30	9	AZ788334 2M0035B19
8	10.2	56.7	32	11	AZ799747 2M0057E19
9	10.2	56.7	22	11	TA353D6P
10	10.2	56.7	30	10	CZ474521
11	10.2	55.6	22	9	AZ990555
12	10.2	55.6	24	11	TA386G12P
13	10.2	55.6	26	9	AZ814137
14	10.2	55.6	29	9	AZ801848 2M0060A03
15	10.2	55.6	20	9	AZ828387 2M0105P13
16	9.8	54.4	21	9	AZ607907 1M0430A12
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18	9.8	54.4	24	9	AZ448189 1M0245A16
19	9.8	54.4	26	9	AQ025266 EP(3)3084
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25	9.8	54.4	30	2	BE297610
26	9.6	53.3	19	10	AJ600497
27	9.6	53.3	21	6	CF313697
28	9.6	53.3	22	1	AI339084
29	9.6	53.3	27	9	AI664440
30	9.6	53.3	27	9	AZ779701
31	9.6	53.3	28	1	AA721232
32	9.6	53.3	28	9	AZ837343
33	9.6	53.3	29	3	BM399313
34	9.4	52.2	23	10	AJ590743
35	9.4	52.2	23	9	AZ808123
36	9.4	52.2	24	9	AZ650143
37	9.4	52.2	28	1	AI006239
38	9.4	52.2	29	9	AZ309550
39	9.2	51.1	17	2	BG29060
40	9.2	51.1	17	10	AJ589517
41	9.2	51.1	19	9	AZ338061
42	9.2	51.1	20	3	BM395725
43	9.2	51.1	20	3	BM396970
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45	9.2	51.1	21	10	AG200331
46	9.2	51.1	22	1	AA916047
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48	9.2	51.1	22	9	AZ776605
49	9.2	51.1	22	9	AZ942574
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51	9.2	51.1	23	3	BM398156
52	9.2	51.1	23	3	BM400878
53	9.2	51.1	23	9	AZ824868
54	9.2	51.1	24	3	BM399223
55	9.2	51.1	24	9	AZ822973
56	9.2	51.1	25	3	BM398297
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60	9.2	51.1	27	3	BM401118
61	9.2	51.1	28	1	AI625245
62	9.2	51.1	28	9	AZ829200
63	9.2	51.1	29	3	BP917129
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65	9.2	51.1	30	1	AJ800192
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72	9.2	51.1	30	9	AZ417335
73	9.2	51.1	25	9	AZ313750
74	9.2	51.1	26	9	BZ353872
75	9.2	51.1	27	8	H28040
76	9.2	51.1	27	9	AZ655871
77	9.2	51.1	28	1	AI218854
78	9.2	51.1	29	1	AU258137
79	9.2	51.1	29	9	AZ973455
80	9.2	51.1	29	10	AJ597868
81	9.2	51.1	30	8	H41620
82	9.2	51.1	30	9	AZ609886
83	9.2	51.1	30	9	AZ841487
84	9.2	51.1	30	10	CZ476297
85	9.2	51.1	30	10	CZ477565
86	9.2	51.1	16	3	BM400407
87	9.2	51.1	17	1	AM246940
88	9.2	51.1	17	3	BM396999
89	9.2	51.1	17	3	BM398259
90	9.2	51.1	18	1	AM250267
91	9.2	51.1	18	3	BM401285
92	9.2	51.1	18	3	BM401332
93	9.2	51.1	19	3	BM396264
94	9.2	51.1	19	3	BM399863
95	9.2	51.1	20	3	BM398685
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C 97	8.8	48.9	20	6	CF306620	CF306620 HDAL--04-	C 170	8.6	47.8	30	6	CF107199	CF107199 Shulezom1
C 98	8.8	48.9	21	3	BM398777	BM398777 5009-0-5-	C 171	8.6	47.8	30	6	CF108073	CF108073 Shulezom1
C 99	8.8	48.9	22	3	BM398285	BM398285 5009-0-43	C 172	8.6	47.8	30	6	CF642522	CF642522 D52 F10 F
C 100	8.8	48.9	22	3	BM398732	BM398732 5009-0-49	C 173	8.6	47.8	30	9	AZ341843	AZ341843 IM0074F06
C 101	8.8	48.9	22	9	AZ801946	AZ801946 2M0060E07	C 174	8.6	47.8	30	10	CZ474386	CZ474386 d05207-3D
C 102	8.8	48.9	22	11	TA140A04P	TA140A04P	C 175	8.6	47.8	30	10	AG193809	AG193809 Pan trogl
C 103	8.8	48.9	22	11	TA290E03P	TA290E03P	C 176	8.6	47.8	30	10	CG112688	CG112688 ZEBRA_2R
C 104	8.8	48.9	23	3	BM395631	BM395631 5009-0-1-	C 177	8.4	46.7	15	8	BO595235	BO595235 E012708-0
C 105	8.8	48.9	23	3	BM398329	BM398329 5009-0-44	C 178	8.4	46.7	14	8	CV933688	CV933688 PMPCM_35
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C 107	8.8	48.9	24	9	AZ582169	AZ582169 1M0374F20	C 180	8.4	46.7	19	9	AZ893642	AZ893642 2M0135C23
C 108	8.8	48.9	24	9	AZ778960	AZ778960 2M0014J08	C 181	8.4	46.7	20	1	AJ747389	AJ747389 AJ747389
C 109	8.8	48.9	25	3	BM396163	BM396163 5009-0-18	C 182	8.4	46.7	20	8	CV933489	CV933489 PMPCM_15
C 110	8.8	48.9	25	3	BM399135	BM399135 5009-0-53	C 183	8.4	46.7	20	9	AZ308311	AZ308311 IM0011J12
C 111	8.8	48.9	25	9	AZ423795	AZ423795 1M0203I21	C 184	8.4	46.7	20	9	AZ453617	AZ453617 1M0255C08
C 112	8.8	48.9	25	9	AZ654166	AZ654166 1M0528M12	C 185	8.4	46.7	21	10	CL651972	CL651972 PRI0113C
C 113	8.8	48.9	25	10	CZ471608	CZ471608 d00453-3D	C 186	8.4	46.7	22	3	BM398650	BM398650 5009-0-48
C 114	8.8	48.9	25	11	TA175B10P	TA175B10P	C 187	8.4	46.7	22	3	AZ602332	AZ602332 1M0421I04
C 115	8.8	48.9	26	10	AG197173	AG197173 Pan trogl	C 188	8.4	46.7	23	10	AJ591934	AJ591934 Arabidops
C 116	8.8	48.9	27	3	BM398263	BM398263 5009-0-43	C 189	8.4	46.7	23	10	AZ429377	AZ429377 SALK 0971
C 117	8.8	48.9	27	3	BM400585	BM400585 5009-0-76	C 190	8.4	46.7	23	11	TA220G12P	TA220G12P
C 118	8.8	48.9	27	10	CZ443044	CZ443044 1B87A10.F	C 191	8.4	46.7	24	1	BM864943	BM864943 SALK 0971
C 119	8.8	48.9	27	10	CG723368	CG723368 1119076A1	C 192	8.4	46.7	25	1	AA880161	AA880161 v96R04.r
C 120	8.8	48.9	27	11	TA103C01P	TA103C01P	C 193	8.4	46.7	25	1	AJ796726	AJ796726 AJ796726
C 121	8.8	48.9	28	9	AZ341930	AZ341930 1M0074K10	C 194	8.4	46.7	25	6	CF338204	CF338204 JMT--08-P
C 122	8.8	48.9	29	3	BM398171	BM398171 5009-0-41	C 195	8.4	46.7	25	8	H30582	H30582 Y124e12.r1
C 123	8.8	48.9	29	6	CF281544	CF281544 14FTU--08	C 196	8.4	46.7	25	9	AZ779437	AZ779437 2M0015B20
C 124	8.8	48.9	29	9	AZ579586	AZ579586 1M0367N07	C 197	8.4	46.7	25	10	CZ470425	CZ470425 606011-5D
C 125	8.8	48.9	29	11	TA211B01P	TA211B01P	C 198	8.4	46.7	26	1	AJ747615	AJ747615 AJ747615
C 126	8.8	48.9	30	1	AM064361	AM064361 SP0935 KR	C 199	8.4	46.7	26	10	CZ475837	CZ475837 d07613-3D
C 127	8.8	48.9	30	3	BM396162	BM396162 5009-0-18	C 200	8.4	46.7	26	11	BM401287	BM401287 T. brucei
C 128	8.8	48.9	30	3	BM398127	BM398127 5009-0-41	C 201	8.4	46.7	27	9	AZ474429	AZ474429 1M0292B22
C 129	8.8	48.9	30	5	BO593742	BO593742 E012763-0	C 202	8.4	46.7	27	9	BM401287	BM401287 1M0422O19
C 130	8.8	48.9	30	9	AZ592002	AZ592002 1M0402H03	C 203	8.4	46.7	27	9	AZ603545	AZ603545 1M0422O19
C 131	8.8	48.9	30	10	CL523751	CL523751 DML5C03 F	C 204	8.4	46.7	28	1	AJ747615	AJ747615 AJ747615
C 132	8.6	47.8	17	10	AJ589066	AJ589066 Arabidops	C 205	8.4	46.7	28	1	AJ679993	AJ679993 AJ679993
C 133	8.6	47.8	19	3	BM395830	BM395830 5009-0-12	C 206	8.4	46.7	28	6	CF316792	CF316792 HD--06-D1
C 134	8.6	47.8	19	3	BM399859	BM399859 5009-0-62	C 207	8.4	46.7	28	6	CF316792	CF316792 1M0106H17
C 135	8.6	47.8	20	9	AZ317789	AZ317789 1M0036L10	C 208	8.4	46.7	28	9	AZ380930	AZ380930 1M0137E08
C 136	8.6	47.8	20	9	AZ848532	AZ848532 2M0149M01	C 209	8.4	46.7	28	9	AZ605911	AZ605911 1M0427H01
C 137	8.6	47.8	20	10	CL683056	CL683056 PRI0135d	C 210	8.4	46.7	28	9	BM901484	BM901484 SALK 0796
C 138	8.6	47.8	21	1	AJ668099	AJ668099 AJ668099	C 211	8.4	46.7	28	11	TA297C09Q	TA297C09Q
C 139	8.6	47.8	21	1	AJ800791	AJ800791	C 212	8.4	46.7	29	3	BM396571	BM396571
C 140	8.6	47.8	21	9	AZ945150	AZ945150 2M0206L19	C 213	8.4	46.7	29	6	CF317167	CF317167 HD--06-M0
C 141	8.6	47.8	21	10	AG201647	AG201647 Pan trogl	C 214	8.4	46.7	29	6	CF317167	CF317167 HD--06-M1
C 142	8.6	47.8	22	2	BG928486	BG928486 HNC48-1-H	C 215	8.4	46.7	29	6	CF317167	CF317167 HD--06-M1
C 143	8.6	47.8	22	9	AZ840093	AZ840093 2M0136B04	C 216	8.4	46.7	29	6	CF317167	CF317167 HD--06-M1
C 144	8.6	47.8	23	3	BM394302	BM394302 50072-2-3	C 217	8.4	46.7	29	9	AZ391934	AZ391934 1M0158N14
C 145	8.6	47.8	23	3	BM395136	BM395136 50072-2-7	C 218	8.4	46.7	29	9	AZ395488	AZ395488 1M0159A07
C 146	8.6	47.8	23	3	BM396053	BM396053 5009-0-16	C 219	8.4	46.7	29	11	DM5547041	DM5547041
C 147	8.6	47.8	23	7	CK814887	CK814887 RAS98565	C 220	8.4	46.7	30	11	TA168C12Q	TA168C12Q
C 148	8.6	47.8	23	9	AZ312575	AZ312575 1M0028D03	C 221	8.4	46.7	30	1	AJ746806	AJ746806
C 149	8.6	47.8	23	9	AZ387861	AZ387861 1M0147M21	C 222	8.4	46.7	30	6	CF107199	CF107199 Shulezom1
C 150	8.6	47.8	24	3	CT019678	CT019678 KBrH126B2	C 223	8.4	46.7	30	10	CZ470701	CZ470701 C06458-5D
C 151	8.6	47.8	24	3	BM401311	BM401311 5009-0-85	C 224	8.4	46.7	30	10	CZ473207	CZ473207 D03158-3D
C 152	8.6	47.8	24	9	AZ612609	AZ612609 1M0439P23	C 225	8.4	46.7	30	10	CZ479759	CZ479759 e01951-5P
C 153	8.6	47.8	24	9	AZ786207	AZ786207 2M0303O04	C 226	8.4	46.7	30	11	TA68B03P	TA68B03P
C 154	8.6	47.8	25	1	A1471126	A1471126 t190e05.x	C 227	8.2	45.6	16	2	BG900981	BG900981 HOA52-1-D
C 155	8.6	47.8	25	1	A1914887	A1914887 t126f109.x	C 228	8.2	45.6	18	3	BM399785	BM399785 5009-0-61
C 156	8.6	47.8	25	10	CG724924	CG724924 1119083B0	C 229	8.2	45.6	19	3	BM397535	BM397535 5009-0-34
C 157	8.6	47.8	26	7	CF839684	CF839684 p8HB003XD	C 230	8.2	45.6	19	6	CF306280	CF306280 HOA1--03-
C 158	8.6	47.8	26	7	CF844223	CF844223 p8HB027XC	C 231	8.2	45.6	19	6	CF542982	CF542982 S014680W-
C 159	8.6	47.8	26	8	DN955514	DN955514 t188h11.g	C 232	8.2	45.6	19	9	AZ600709	AZ600709 1M0418H10
C 160	8.6	47.8	26	9	AZ360188	AZ360188 1M0103O04	C 233	8.2	45.6	19	9	AZ862767	AZ862767 2M0170A09
C 161	8.6	47.8	26	9	AZ655080	AZ655080 1M0103O04	C 234	8.2	45.6	20	9	AZ410583	AZ410583 1M0182E24
C 162	8.6	47.8	26	9	AZ655080	AZ655080 1M0103O04	C 235	8.2	45.6	20	9	AZ466572	AZ466572 1M0277E20
C 163	8.6	47.8	26	10	CG732937	CG732937 1119153A0	C 236	8.2	45.6	21	9	AZ643740	AZ643740 1M0507D22
C 164	8.6	47.8	27	9	AZ822698	AZ822698 2M0096F109	C 237	8.2	45.6	21	9	AZ643740	AZ643740 1M0507D22
C 165	8.6	47.8	28	9	AQ025692	AQ025692 1(2)K0080	C 238	8.2	45.6	21	9	AZ647787	AZ647787 1M0514P24
C 166	8.6	47.8	28	10	CZ443095	CZ443095 IBB8D04.F	C 239	8.2	45.6	21	9	AZ657873	AZ657873 1M0534P17
C 167	8.6	47.8	30	1	AJ7746842	AJ7746842	C 240	8.2	45.6	21	9	AZ828828	AZ828828 2M0106O04
C 168	8.6	47.8	30	2	BE384364	BE384364 601277465	C 241	8.2	45.6	21	11	TA20G06P	TA20G06P



242	8.2	45.6	21	11	TA37G05Q	AL45536 T. Brucei	C 315	8	44.4	20	9	AZ823558	AZ823558 2M0097B08
243	8.2	45.6	22	1	AA908583	AA908583 0G84D03.s	C 316	8	44.4	21	3	BM396885	BM396885 5009-0-26
C 244	8.2	45.6	22	3	BM399021	BM399021 5009-0-52	C 317	8	44.4	21	9	AZ819244	AZ819244 2M0089F14
C 245	8.2	45.6	22	9	AZ790062	AZ790062 2M0038B01	C 318	8	44.4	21	9	AZ875300	AZ875300 2M0189D22
C 246	8.2	45.6	22	9	AZ863452	AZ863452 2M017BC03	C 319	8	44.4	21	10	CL668724	CL668724 PRI0158C
247	8.2	45.6	23	9	AZ781499	AZ781499 2M0019N20	C 320	8	44.4	22	1	AA905584	AA905584 0K02A11.s
C 248	8.2	45.6	23	11	TA265A03P	AL484822 T. Brucei	C 321	8	44.4	22	1	AA911600	AA911600 0G90D06.s
C 249	8.2	45.6	24	6	CA850750	CA850750 D06B05_B0	C 322	8	44.4	22	9	AZ309502	AZ309502 1M0013C03
250	8.2	45.6	24	8	DN954821	DN954821 fL78c12.g	C 323	8	44.4	22	9	AZ592201	AZ592201 1M0402K24
251	8.2	45.6	24	11	TA122F01P	AL464967 T. Brucei	C 324	8	44.4	22	9	AZ954618	AZ954618 2M0220E20
252	8.2	45.6	25	1	AI000890	AI000890 0G56H04.s	C 325	8	44.4	22	9	AZ976414	AZ976414 2M0251N16
253	8.2	45.6	25	1	AI002379	AI002379 0G87F02.s	C 326	8	44.4	23	3	BM392543	BM392543 50071-2-1
254	8.2	45.6	25	1	AI567310	AI567310 lP63A08.x	C 327	8	44.4	23	3	BM393611	BM393611 50072-2-1
C 255	8.2	45.6	25	1	AI625653	AI625653 tY58e06.x	C 328	8	44.4	23	9	AZ309458	AZ309458 1M0013F14
C 256	8.2	45.6	25	1	AI762378	AI762378 w154F10.x	C 329	8	44.4	23	9	AZ479801	AZ479801 1M0300G16
C 257	8.2	45.6	25	9	AZ335705	AZ335705 1M0065H19	C 330	8	44.4	23	9	AZ627985	AZ627985 1M0476C06
C 258	8.2	45.6	25	10	CZ473252	CZ473252 d03237-5P	C 331	8	44.4	23	11	TA355E02P	AL93921 T. Brucei
C 259	8.2	45.6	26	5	BQ590944	BQ590944 E012598-0	C 332	8	44.4	24	7	CV025466	CV025466 3151_Full1
C 260	8.2	45.6	26	8	CX002194	CX002194 1V45D09.b	C 333	8	44.4	24	9	AZ443047	AZ443047 1M0237I06
C 261	8.2	45.6	26	9	AZ627130	AZ627130 1M0467D07	C 334	8	44.4	24	9	AZ480758	AZ480758 1M0302G04
C 262	8.2	45.6	26	9	AZ806665	AZ806665 2M0068F20	C 335	8	44.4	24	9	AZ762096	AZ762096 1M0556J18
C 263	8.2	45.6	26	9	BH610036	BH610036 KC00300-5	C 336	8	44.4	24	9	AZ991908	AZ991908 2M0276B21
C 264	8.2	45.6	26	9	BH840747	BH840747 KC07184-5	C 337	8	44.4	25	1	AA912857	AA912857 0132D04.s
C 265	8.2	45.6	26	10	CL527917	CL527917 EY06523-3	C 338	8	44.4	25	1	AI569102	AI569102 tF82B04.x
C 266	8.2	45.6	26	11	TA111A09P	AL461838 T. Brucei	C 339	8	44.4	25	1	AI564597	AI564597 tG92H08.x
C 267	8.2	45.6	26	11	TA376C02P	AL497551 T. Brucei	C 340	8	44.4	25	2	BG925523	BG925523 HMC5-1-D5
C 268	8.2	45.6	27	1	AJ6688209	AJ6688209 AJ668209	C 341	8	44.4	25	3	BM400594	BM400594 5009-0-76
269	8.2	45.6	27	5	BQ584417	BQ584417 E011861-0	C 342	8	44.4	25	9	AZ488195	AZ488195 1M0318P16
270	8.2	45.6	27	6	CF308829	CF308829 ABF--02-M	C 343	8	44.4	25	10	CZ477979	CZ477979 e00071-5P
271	8.2	45.6	27	7	CO778243	CO778243 BL003B_DO	C 344	8	44.4	25	10	CZ477982	CZ477982 e00074-5P
C 272	8.2	45.6	27	9	AZ478311	AZ478311 1M0298K13	C 345	8	44.4	25	10	AJ588708	AJ588708 Arbidocis
C 273	8.2	45.6	27	9	AZ769505	AZ769505 1M0570L17	C 346	8	44.4	25	11	TA234810Q	AL81273 T. Brucei
C 274	8.2	45.6	27	9	AZ777400	AZ777400 2M0011J16	C 347	8	44.4	26	3	BM397341	BM397341 5009-0-31
275	8.2	45.6	27	9	AZ797801	AZ797801 2M0054A18	C 348	8	44.4	26	3	BM397648	BM397648 5009-0-35
276	8.2	45.6	27	9	AZ969108	AZ969108 2M0241E13	C 349	8	44.4	26	3	BM397671	BM397671 5009-0-35
277	8.2	45.6	27	9	BH865568	BH865568 SALK_0989	C 350	8	44.4	26	3	BM400727	BM400727 5009-0-78
278	8.2	45.6	27	10	CZ470049	CZ470049 C05504-5P	C 351	8	44.4	26	9	AZ358236	AZ358236 1M0100N05
279	8.2	45.6	27	10	AG195450	AG195450 Pan tIrog1	C 352	8	44.4	26	9	AZ377993	AZ377993 1M0132M02
C 280	8.2	45.6	27	11	CT014304	CT014304 KBtH12B2	C 353	8	44.4	26	9	BH810744	BH810744 SALK_0511
C 281	8.2	45.6	28	1	AI699157	AI699157 tX61B09.x	C 354	8	44.4	26	10	CZ194600	CZ194600 PST5602-N
C 282	8.2	45.6	28	1	AU264991	AU264991 AU264991	C 355	8	44.4	26	10	CZ917190	CZ917190 4021004F0
C 283	8.2	45.6	28	5	BQ593079	BQ593079 S015672-0	C 356	8	44.4	26	11	TA119D03P	BM395101 50072-2-7
C 284	8.2	45.6	28	8	H68053	H68053 Yr74F04.x1	C 357	8	44.4	27	3	BM395101	BM395101 5009-0-58
C 285	8.2	45.6	28	9	AZ310671	AZ310671 1M0025D13	C 358	8	44.4	27	3	BM399490	BM399490 5009-0-0-1
C 286	8.2	45.6	28	9	AZ365824	AZ365824 1M0112114	C 359	8	44.4	27	9	AZ813853	AZ813853 2M0081O22
287	8.2	45.6	28	9	AZ503891	AZ503891 1M0343A24	C 360	8	44.4	27	9	AZ864233	AZ864233 2M0173P12
288	8.2	45.6	28	10	CZ469968	CZ469968 C05310-5P	C 361	8	44.4	27	9	AZ981096	AZ981096 2M0258I20
289	8.2	45.6	28	10	CZ469973	CZ469973 C05436A-5	C 362	8	44.4	27	10	CZ194691	CZ194691 PST8041-N
290	8.2	45.6	28	10	CZ470011	CZ470011 C05469-5P	C 363	8	44.4	27	10	CZ470259	CZ470259 C05796-5P
C 291	8.2	45.6	29	8	NB85094	NB85094 J2291P_Huma	C 364	8	44.4	27	10	CZ474725	CZ474725 d05779-3D
292	8.2	45.6	29	9	AZ308580	AZ308580 1M0011O10	C 365	8	44.4	27	10	CG906749	CG906749 4011002G0
293	8.2	45.6	29	9	AZ514432	AZ514432 1M0361J13	C 366	8	44.4	27	10	AG194436	AG194436 Pan tIrog1
C 294	8.2	45.6	29	10	CG715036	CG715036 1119039F0	C 367	8	44.4	27	10	AG200882	AG200882 Pan tIrog1
C 295	8.2	45.6	30	2	BI223044	BI223044 602943380	C 368	8	44.4	27	10	CG731860	CG731860 1119144B0
C 296	8.2	45.6	30	3	BI556227	BI556227 603237625	C 369	8	44.4	27	10	CL671129	CL671129 PRI0163d
297	8.2	45.6	30	3	BM042344	BM042344 603616447	C 370	8	44.4	28	1	AA871664	AA871664 vG39805.r
298	8.2	45.6	30	3	BM398771	BM398771 5009-0-5-	C 371	8	44.4	28	1	AA895705	AA895705 vY14D02.r
299	8.2	45.6	30	8	H39150	H39150 Ym83e09.x1	C 372	8	44.4	28	1	AI085431	AI085431 0W82h11.s
300	8.2	45.6	30	8	AZ484304	AZ484304 1M0310L07	C 373	8	44.4	28	1	AI591048	AI591048 tW27H07.x
C 301	8.2	45.6	30	9	AZ762339	AZ762339 2M0009P07	C 374	8	44.4	28	1	AI633014	AI633014 tE33d07.x
C 302	8.2	45.6	30	9	AZ854289	AZ854289 2M0157M17	C 375	8	44.4	28	3	BM400148	BM400148 5009-0-68
C 303	8.2	45.6	30	10	CZ472166	CZ472166 d01330-5P	C 376	8	44.4	28	9	AZ321201	AZ321201 1M0041L10
C 304	8.2	45.6	30	10	CZ475459	CZ475459 d06372-5P	C 377	8	44.4	28	9	AZ480444	AZ480444 1M0302A06
C 305	8.2	45.6	30	11	TA123E05P	AL463071 T. Brucei	C 378	8	44.4	28	9	AZ794115	AZ794115 2M0407D16
C 306	8.2	44.4	19	9	AZ579084	AZ579084 1M0363M07	C 379	8	44.4	28	9	BH903329	BH903329 SALK_1024
C 307	8.2	44.4	20	3	BM399235	BM399235 5009-0-55	C 380	8	44.4	28	11	TA263A05P	AL483783 T. Brucei
C 308	8.2	44.4	20	3	BM401089	BM401089 5009-0-85	C 381	8	44.4	29	1	AJ687515	AJ687515 AJ687515
C 309	8.2	44.4	20	3	BM401255	BM401255 5009-0-85	C 382	8	44.4	29	1	AJ687515	AJ687515 AJ687515
C 310	8.2	44.4	20	8	DN988668	DN988668 ZEBRA_28R	C 383	8	44.4	29	6	CD531197	CD531197 09004_Ara
C 311	8.2	44.4	20	9	AZ309960	AZ309960 1M0017P21	C 384	8	44.4	29	9	AZ387832	AZ387832 1M0147F23
312	8.2	44.4	20	9	AZ454706	AZ454706 1M0256G16	C 385	8	44.4	29	9	AZ646100	AZ646100 1M0511P19
C 313	8.2	44.4	20	9	AZ589950	AZ589950 1M0390A16	C 386	8	44.4	29	9	AZ658555	AZ658555 1M0535I13
C 314	8.2	44.4	20	9	AZ780925	AZ780925 2M0018A16	C 387	8	44.4	29	9	BH910831	BH910831 SALK_0627

C 388	8	44.4	29	9	BZ382697	BZ382697 SALK_1186	461	7.8	43.3	25	10	AJ588655	AJ588655 Arabidops
C 389	8	44.4	29	9	BZ595111	BZ595111 SALK_0861	462	7.8	43.3	25	11	HSWCJ7C02	HSWCJ7C02 Arabidops
C 390	8	44.4	29	10	CZ194796	CZ194796 PST10543-	C 463	7.8	43.3	26	11	AJ678364	AJ678364 H. sapiens D
C 391	8	44.4	29	10	CZ472219	CZ472219 d01414-5D	C 464	7.8	43.3	26	1	AM247005	AM247005 2822407.5
C 392	8	44.4	29	10	CZ473764	CZ473764 d04158-3P	C 465	7.8	43.3	26	5	C53390	C53390 C53390 Yuj1
C 393	8	44.4	29	11	TA570F08P	TA570F08P	C 466	7.8	43.3	26	9	AZ637079	AZ637079 IM0496F09
C 394	8	44.4	30	3	BI766481	BI766481 603052559	C 467	7.8	43.3	26	9	AZ776943	AZ776943 2M0011G03
C 395	8	44.4	30	3	BM399436	BM399436 5009-0-57	C 468	7.8	43.3	26	10	AJ588905	AJ588905 Arabidops
C 396	8	44.4	30	3	BM400951	BM400951 5009-0-80	C 469	7.8	43.3	27	9	AZ347928	AZ347928 IM0084D14
C 397	8	44.4	30	7	CO778803	CO778803 BL004D DO	C 470	7.8	43.3	27	9	AZ480248	AZ480248 IM0306G21
C 398	8	44.4	30	9	AZ363558	AZ363558 IM0109F06	C 471	7.8	43.3	27	9	AZ579571	AZ579571 IM0367M03
C 399	8	44.4	30	9	AZ501729	AZ501729 IM0340N09	C 472	7.8	43.3	27	9	AZ655087	AZ655087 IM0529C23
C 400	8	44.4	30	9	AZ579308	AZ579308 IM0363O09	C 473	7.8	43.3	27	9	AZ813989	AZ813989 2M0081F03
C 401	8	44.4	30	9	AZ639261	AZ639261 IM0439E08	C 474	7.8	43.3	27	10	CG724977	CG724977 1119083D0
C 402	8	44.4	30	9	AZ664115	AZ664115 IM0544D10	C 475	7.8	43.3	27	11	TA90805P	TA90805P
C 403	8	44.4	30	9	AZ852928	AZ852928 2M0155L19	C 476	7.8	43.3	28	1	AI052223	AI052223 c221A01.x
C 404	8	44.4	30	9	AZ976285	AZ976285 2M0251H09	C 477	7.8	43.3	28	1	BM400318	BM400318 5009-0-71
C 405	8	44.4	30	10	CZ471063	CZ471063 C06895-5P	C 478	7.8	43.3	28	3	BM400318	BM400318 RCL1--08-
C 406	8	44.4	30	10	CZ476295	CZ476295 d08561-5P	C 479	7.8	43.3	28	6	DN985957	DN985957 MSU_2F_2
C 407	8	44.4	30	10	AL938117	AL938117 Arabidops	C 480	7.8	43.3	28	8	W92724	W92724 zd92a07.s1
C 408	8	44.4	30	10	CG762689	CG762689 1119089C0	C 481	7.8	43.3	28	8	AZ307106	AZ307106 IM0008P23
C 409	8	44.4	15	10	AJ600925	AJ600925 Arabidops	C 482	7.8	43.3	28	9	AZ427371	AZ427371 IM0428N24
C 410	7.8	43.3	18	3	BM398017	BM398017 5009-0-4-	C 483	7.8	43.3	28	9	AZ606831	AZ606831 1M0537K08
C 411	7.8	43.3	18	10	CL652218	CL652218 PRI0114D-	C 484	7.8	43.3	28	9	AZ659656	AZ659656 2M0070N21
C 412	7.8	43.3	19	6	CF281784	CF281784 14BTL--08	C 485	7.8	43.3	28	9	AZ780629	AZ780629 2M0018K11
C 413	7.8	43.3	19	6	CF293217	CF293217 30DGS--02	C 486	7.8	43.3	28	9	AZ807840	AZ807840 IM0007G07
C 414	7.8	43.3	19	6	CO577706	CO577706 TVEST08C2	C 487	7.8	43.3	29	9	AZ306174	AZ306174 IM0007G07
C 415	7.8	43.3	19	9	AZ490174	AZ490174 IM0323B05	C 488	7.8	43.3	29	9	AZ470233	AZ470233 IM0284P10
C 416	7.8	43.3	19	9	AZ813099	AZ813099 2M0080P09	C 489	7.8	43.3	29	9	AZ663335	AZ663335 1M0542J20
C 417	7.8	43.3	20	5	BX563610	BX563610 BX563610	C 490	7.8	43.3	29	9	AZ961028	AZ961028 2M0229G21
C 418	7.8	43.3	20	6	CF281215	CF281215 14BTL--08	C 491	7.8	43.3	29	10	AG192228	AG192228 Pan trog1
C 419	7.8	43.3	20	6	AZ639273	AZ639273 IM0119H13	C 492	7.8	43.3	29	10	AG198112	AG198112 Pan trog1
C 420	7.8	43.3	20	9	AZ766411	AZ766411 IM0564B02	C 493	7.8	43.3	30	6	CB848656	CB848656 MRA-0173
C 421	7.8	43.3	20	9	AZ815477	AZ815477 2M0083C17	C 494	7.8	43.3	30	9	T99092	T99092 Yef7E08.s1
C 422	7.8	43.3	20	9	AZ859065	AZ859065 2M0164F06	C 495	7.8	43.3	30	9	AZ483233	AZ483233 IM0308H16
C 423	7.8	43.3	21	9	AZ662090	AZ662090 IM0541C02	C 496	7.8	43.3	30	9	AZ539393	AZ539393 2M0150J16
C 424	7.8	43.3	21	9	AZ812861	AZ812861 2M0079C19	C 497	7.8	43.3	30	9	CZ471750	CZ471750 d00699-3P
C 425	7.8	43.3	21	9	AZ863356	AZ863356 2M0171N17	C 498	7.8	43.3	30	10	CZ473906	CZ473906 d04402-5P
C 426	7.8	43.3	22	6	CA587495	CA587495 LBE13P07P	C 499	7.8	43.3	30	10	CZ474694	CZ474694 d05737-3P
C 427	7.8	43.3	22	7	CO794327	CO794327 NMT020B DO	C 500	7.8	43.3	30	10	CZ475459	CZ475459 d06972-5P
C 428	7.8	43.3	22	9	AZ478594	AZ478594 IM0298I15	C 501	7.8	43.3	30	10	CZ476577	CZ476577 d09130-5P
C 429	7.8	43.3	22	9	AZ786328	AZ786328 2M0031G14	C 502	7.8	43.3	30	10	BMX85017	BMX85017 Arabidops
C 430	7.8	43.3	22	9	AZ990787	AZ990787 2M0274J08	C 503	7.8	43.3	30	10	TA164F03Q	TA164F03Q
C 431	7.8	43.3	22	10	AG195487	AG195487 Pan trog1	C 504	7.8	43.3	30	11	BM400398	BM400398 5009-0-72
C 432	7.8	43.3	22	11	TA334H05Q	TA334H05Q	C 505	7.8	43.3	30	15	BM400400	BM400400 5009-0-72
C 433	7.8	43.3	23	3	BM396286	BM396286 5009-0-2-	C 506	7.8	43.3	30	15	BM396858	BM396858 5009-0-25
C 434	7.8	43.3	23	3	BM398474	BM398474 5009-0-45	C 507	7.8	43.3	30	16	BM398519	BM398519 5009-0-46
C 435	7.8	43.3	23	9	AZ649175	AZ649175 IM0518D08	C 508	7.8	43.3	30	17	BM400692	BM400692 5009-0-77
C 436	7.8	43.3	23	9	AZ760383	AZ760383 IM0554C08	C 509	7.8	43.3	30	17	BM400706	BM400706 5009-0-77
C 437	7.8	43.3	23	9	AZ783377	AZ783377 2M0025I04	C 510	7.8	43.3	30	17	BM401224	BM401224 5009-0-84
C 438	7.8	43.3	23	9	AZ792478	AZ792478 2M0043O22	C 511	7.8	43.3	30	17	CF306383	CF306383 HDAL--03-
C 439	7.8	43.3	23	9	AZ807263	AZ807263 2M0070C02	C 512	7.8	43.3	30	17	AM246949	AM246949 2822577.5
C 440	7.8	43.3	23	9	AZ960758	AZ960758 2M0228L19	C 513	7.8	43.3	30	18	BM401247	BM401247 5009-0-84
C 441	7.8	43.3	23	10	AG195537	AG195537 Pan trog1	C 514	7.8	43.3	30	18	BM397791	BM397791 5009-0-37
C 442	7.8	43.3	24	9	AZ648378	AZ648378 IM0517D24	C 515	7.8	43.3	30	19	BM399791	BM399791 5009-0-61
C 443	7.8	43.3	24	9	AZ827494	AZ827494 2M0103M24	C 516	7.8	43.3	30	19	BM400016	BM400016 5009-0-64
C 444	7.8	43.3	24	9	AZ829689	AZ829689 2M0107C22	C 517	7.8	43.3	30	19	BM400016	BM400016 5009-0-82
C 445	7.8	43.3	24	10	CL671772	CL671772 PRI0165C-	C 518	7.8	43.3	30	19	BM401080	BM401080 5009-0-82
C 446	7.8	43.3	25	1	AJ651876	AJ651876 AJ651876	C 519	7.8	43.3	30	19	BM400506	BM400506 5009-0-74
C 447	7.8	43.3	25	5	BO594927	BO594927 S015257-0	C 520	7.8	43.3	30	19	BM400757	BM400757 5009-0-78
C 448	7.8	43.3	25	6	CD028601	CD028601 m9a007xk	C 521	7.8	43.3	30	20	CD531931	CD531931 12N01 A7a
C 449	7.8	43.3	25	6	CF296241	CF296241 30DGS--07	C 522	7.8	43.3	30	20	CF306206	CF306206 HDAL--03-
C 450	7.8	43.3	25	6	CF302434	CF302434 7LEAF--06	C 523	7.8	43.3	30	20	CF306357	CF306357 HDAL--03-
C 451	7.8	43.3	25	6	CF329185	CF329185 NACL--04-	C 524	7.8	43.3	30	20	CF307109	CF307109 HDAL--05-
C 452	7.8	43.3	25	8	N77071	N77071 YV51A03.r1	C 525	7.8	43.3	30	20	CF339843	CF339843 RCL1--06-
C 453	7.8	43.3	25	9	AZ377661	AZ377661 IM0132C09	C 526	7.8	43.3	30	20	BM400506	BM400506 5009-0-74
C 454	7.8	43.3	25	9	AZ393511	AZ393511 IM0156B07	C 527	7.8	43.3	30	20	BM400757	BM400757 5009-0-78
C 455	7.8	43.3	25	9	AZ514617	AZ514617 IM0361N23	C 528	7.8	43.3	30	20	CF306206	CF306206 HDAL--03-
C 456	7.8	43.3	25	9	AZ760154	AZ760154 IM0553P10	C 529	7.8	43.3	30	20	CF306357	CF306357 HDAL--05-
C 457	7.8	43.3	25	9	BM755405	BM755405 SALK_0490	C 530	7.8	43.3	30	20	CF307109	CF307109 HDAL--05-
C 458	7.8	43.3	25	10	CZ471344	CZ471344 d00042-3P	C 531	7.8	43.3	30	20	CF307109	CF307109 HDAL--05-
C 459	7.8	43.3	25	10	CZ478183	CZ478183 e00295-5P	C 532	7.8	43.3	30	20	CF307109	CF307109 HDAL--05-
C 460	7.8	43.3	25	10	AG195549	AG195549 Pan trog1	C 533	7.8	43.3	30	20	CF339843	CF339843 RCL1--06-

534	7.6	42.2	20	9	AZ336487	AZ336487	1M0066J13	C 607	7.6	42.2	27	3	BM395580	BM395580	5009-0-1-
535	7.6	42.2	20	9	AZ398062	AZ398062	1M0163M14	C 608	7.6	42.2	27	3	BM397484	BM397484	5009-0-0-33
536	7.6	42.2	20	9	AZ452238	AZ452238	1M0252C05	C 609	7.6	42.2	27	3	BM400888	BM400888	5009-0-0-8
537	7.6	42.2	20	9	AZ946089	AZ946089	2M0207A13	C 610	7.6	42.2	27	6	CB841998	CB841998	M15E-2631
538	7.6	42.2	20	10	CZ443088	CZ443088	1B8B808.1	C 611	7.6	42.2	27	6	CB842478	CB842478	M15E-2132
539	7.6	42.2	21	3	BM398334	BM398334	5009-0-0-44	C 612	7.6	42.2	27	8	CBX010447	CBX010447	1046E03.0
540	7.6	42.2	21	3	BM400027	BM400027	5009-0-0-65	C 613	7.6	42.2	27	9	AZ794828	AZ794828	2M0048H18
541	7.6	42.2	21	3	BM400058	BM400058	5009-0-0-65	C 614	7.6	42.2	27	9	AZ848799	AZ848799	2M0149021
542	7.6	42.2	21	3	BM401072	BM401072	5009-0-0-82	C 615	7.6	42.2	27	9	BH910341	BH910341	SAUK 0590
543	7.6	42.2	21	6	CF306412	CF306412	HDA1--03-	C 616	7.6	42.2	27	9	BZ380070	BZ380070	SAUK 1145
544	7.6	42.2	21	6	CF306419	CF306419	HDA1--03-	C 617	7.6	42.2	27	10	CG711726	CG711726	1150222E0
545	7.6	42.2	21	6	CF306998	CF306998	HDA1--05-	C 618	7.6	42.2	28	1	AA930608	AA930608	vy63e12.r
546	7.6	42.2	21	6	CF307416	CF307416	HDA1--06-	C 619	7.6	42.2	28	1	AI244530	AI244530	PK14D06.x
547	7.6	42.2	21	9	AZ352290	AZ352290	1M0090M10	C 620	7.6	42.2	28	1	AI469423	AI469423	tm8E03.x
548	7.6	42.2	21	9	AZ595078	AZ595078	1M0407A03	C 621	7.6	42.2	28	1	AI497711	AI497711	t150a12.x
549	7.6	42.2	21	9	AZ794033	AZ794033	2M0047D12	C 622	7.6	42.2	28	2	BG927514	BG927514	hmc43-1-G
550	7.6	42.2	22	1	AZ955804	AZ955804	2M0222L03	C 623	7.6	42.2	28	3	BM396281	BM396281	5009-0-2-
551	7.6	42.2	22	1	AI219368	AI219368	9914E03.x	C 624	7.6	42.2	28	3	BM396946	BM396946	5009-0-27
552	7.6	42.2	22	1	AI581087	AI581087	C127B11.x	C 625	7.6	42.2	28	3	BM397854	BM397854	5009-0-38
553	7.6	42.2	22	1	AJ684402	AJ684402	AJ684402	C 626	7.6	42.2	28	3	BM398140	BM398140	5009-0-41
554	7.6	42.2	22	6	CF306282	CF306282	HDA1--03-	C 627	7.6	42.2	28	3	BM399880	BM399880	5009-0-62
555	7.6	42.2	22	3	BM396517	BM396517	5009-0-21	C 628	7.6	42.2	28	5	BQ593518	BQ593518	S015526-0
556	7.6	42.2	22	3	BM400659	BM400659	5009-0-77	C 629	7.6	42.2	28	6	CB842022	CB842022	M15E-2655
557	7.6	42.2	22	3	BM400906	BM400906	5009-0-80	C 630	7.6	42.2	28	6	CF340549	CF340549	RCL1--08-
558	7.6	42.2	22	3	BM401082	BM401082	5009-0-82	C 631	7.6	42.2	28	6	CF641011	CF641011	D34.D04.F
559	7.6	42.2	22	6	CF306282	CF306282	HDA1--03-	C 632	7.6	42.2	28	6	CF642819	CF642819	D56.C11.F
560	7.6	42.2	22	8	DN988835	DN988835	ZEBRA.2F	C 633	7.6	42.2	28	6	CF643208	CF643208	DEL.B03.F
561	7.6	42.2	22	9	AZ643849	AZ643849	1M0507H05	C 634	7.6	42.2	28	8	DN953932	DN953932	166d12.g
562	7.6	42.2	22	9	AZ775193	AZ775193	2M0007P16	C 635	7.6	42.2	28	8	H58190	H58190	yr23a11.r
563	7.6	42.2	22	9	AZ807992	AZ807992	2M0017C14	C 636	7.6	42.2	28	8	H70161	H70161	ys01h11.r
564	7.6	42.2	22	9	AZ832064	AZ832064	2M0112M12	C 637	7.6	42.2	28	9	AZ307106	AZ307106	1M0008P23
565	7.6	42.2	22	9	AZ864903	AZ864903	2M0174E13	C 638	7.6	42.2	28	9	AZ355807	AZ355807	1M0095G07
566	7.6	42.2	22	9	AZ950407	AZ950407	2M0214A02	C 639	7.6	42.2	28	9	AZ590898	AZ590898	1M0400A16
567	7.6	42.2	22	10	AJ589652	AJ589652	ArabiIdops	C 640	7.6	42.2	28	9	AZ774408	AZ774408	2M0003P09
568	7.6	42.2	22	10	CL668583	CL668583	PR10158-	C 641	7.6	42.2	28	9	AZ774408	AZ774408	2M0003P09
569	7.6	42.2	23	1	AJ683347	AJ683347	5009-0-28	C 642	7.6	42.2	28	9	AZ804943	AZ804943	2M0066A09
570	7.6	42.2	23	3	BM397056	BM397056	5009-0-44	C 643	7.6	42.2	28	9	AZ806046	AZ806046	2M0067A20
571	7.6	42.2	23	3	BM398068	BM398068	5009-0-44	C 644	7.6	42.2	28	9	BZ286301	BZ286301	K080388-5
572	7.6	42.2	23	3	BM398378	BM398378	5009-0-44	C 645	7.6	42.2	28	10	BZ286301	BZ286301	K080388-5
573	7.6	42.2	23	3	BM399555	BM399555	5009-0-59	C 646	7.6	42.2	28	10	CZ466783	CZ466783	C09565b-5
574	7.6	42.2	23	6	CF290995	CF290995	1AR00T-0	C 647	7.6	42.2	28	10	CZ471450	CZ471450	d00203-3P
575	7.6	42.2	23	6	AZ461315	AZ461315	1M0267F09	C 648	7.6	42.2	28	10	CZ471450	CZ471450	d00203-3P
576	7.6	42.2	23	9	AZ820760	AZ820760	2M0093K07	C 649	7.6	42.2	28	11	C2917643	C2917643	4021006D1
577	7.6	42.2	24	1	AJ797666	AJ797666	5009-0-21	C 650	7.6	42.2	29	1	AU256240	AU256240	T.5pcc61
578	7.6	42.2	24	6	CF306279	CF306279	HDA1--03-	C 651	7.6	42.2	29	5	BQ585120	BQ585120	E011827-0
579	7.6	42.2	24	9	AZ468735	AZ468735	1M0281I14	C 652	7.6	42.2	29	8	AX005939	AX005939	1V23A08.b
580	7.6	42.2	24	9	AZ498817	AZ498817	1M0337O18	C 653	7.6	42.2	29	9	AZ307533	AZ307533	1M0009D22
581	7.6	42.2	24	9	AZ764581	AZ764581	1M0561I03	C 654	7.6	42.2	29	9	AZ430267	AZ430267	1M0214K11
582	7.6	42.2	24	10	CM020463	CM020463	GC0729.TI	C 655	7.6	42.2	29	9	AZ440659	AZ440659	1M0231O15
583	7.6	42.2	24	11	TA151G10P	TA151G10P	5009-0-71	C 656	7.6	42.2	29	10	CZ473155	CZ473155	d03054-3P
584	7.6	42.2	25	1	AA993070	AA993070	5009-0-35	C 657	7.6	42.2	29	10	CZ473155	CZ473155	d03054-3P
585	7.6	42.2	25	1	AI682835	AI682835	wc66h10.s	C 658	7.6	42.2	29	10	AG188890	AG188890	Pan.trogl
586	7.6	42.2	25	5	BQ591292	BQ591292	E012713-0	C 659	7.6	42.2	29	10	AJ590892	AJ590892	ArabiIdops
587	7.6	42.2	25	9	AZ345462	AZ345462	1M0080M10	C 660	7.6	42.2	30	1	AA976515	AA976515	oc30B05.s
588	7.6	42.2	25	9	AZ377955	AZ377955	1M0132F05	C 661	7.6	42.2	30	1	BG245899	BG245899	602358712
589	7.6	42.2	25	9	AZ607076	AZ607076	1M0266O10	C 662	7.6	42.2	30	2	BG819018	BG819018	602781064
590	7.6	42.2	25	9	AZ606849	AZ606849	1M0429A06	C 663	7.6	42.2	30	3	BM396914	BM396914	5009-0-26
591	7.6	42.2	25	9	AZ621173	AZ621173	1M0454B17	C 664	7.6	42.2	30	3	BM397706	BM397706	5009-0-35
592	7.6	42.2	25	9	AZ817126	AZ817126	2M0066D18	C 665	7.6	42.2	30	3	BM399411	BM399411	5009-0-57
593	7.6	42.2	25	9	AZ818242	AZ818242	2M0086G12	C 666	7.6	42.2	30	3	BM400187	BM400187	5009-0-68
594	7.6	42.2	25	9	CG712540	CG712540	1119027E0	C 667	7.6	42.2	30	3	BM400355	BM400355	5009-0-71
595	7.6	42.2	25	10	BM397702	BM397702	5009-0-35	C 668	7.6	42.2	30	3	BM400437	BM400437	5009-0-72
596	7.6	42.2	26	3	BM398073	BM398073	5009-0-4-	C 669	7.6	42.2	30	3	BM400476	BM400476	5009-0-73
597	7.6	42.2	26	3	BM400080	BM400080	5009-0-66	C 670	7.6	42.2	30	3	BM591232	BM591232	5009-0-73
598	7.6	42.2	26	3	BM401251	BM401251	5009-0-84	C 671	7.6	42.2	30	6	CA794646	CA794646	C6C.BJ.11
599	7.6	42.2	26	9	AZ779432	AZ779432	2M0015P14	C 672	7.6	42.2	30	9	AZ366827	AZ366827	1M0116B17
600	7.6	42.2	26	10	CG712508	CG712508	1119027E0	C 673	7.6	42.2	30	9	AZ579308	AZ579308	1M0363C09
601	7.6	42.2	26	10	CG712508	CG712508	1119027E0	C 674	7.6	42.2	30	9	AZ579308	AZ579308	1M0363C09
602	7.6	42.2	27	1	AJ648985	AJ648985	5009-0-71	C 675	7.6	42.2	30	9	AZ682898	AZ682898	1M0481I10
603	7.6	42.2	27	1	AJ648985	AJ648985	5009-0-71	C 676	7.6	42.2	30	9	AZ682898	AZ682898	1M0481I10
604	7.6	42.2	27	1	AJ648985	AJ648985	5009-0-71	C 677	7.6	42.2	30	9	AZ682898	AZ682898	1M0481I10
605	7.6	42.2	27	3	BM392622	BM392622	50071-2-1	C 678	7.6	42.2	30	9	AZ831042	AZ831042	2M0110P04
606	7.6	42.2	27	3	BM393779	BM393779	50072-2-1	C 679	7.6	42.2	30	9	AZ864740	AZ864740	2M0174C05

C 680	7.6	42.2	30	10	CZ472706	CZ472706 d02258-5P	753	7.4	41.1	23	11	TA820D0Q	AL459952 T. brucei
C 681	7.6	42.2	30	10	CZ474109	CZ474109 d04747-3P	754	7.4	41.1	24	2	BG925568	BG925568 HNC5-1-B1
C 682	7.6	42.2	30	10	CZ474357	CZ474357 d05161-5P	755	7.4	41.1	24	3	BM399134	BM399134 5009-0-53
C 683	7.6	42.2	30	10	CZ474357	CZ474357 d05161-5P	756	7.4	41.1	24	8	CX004770	CX004770 IV30B11.b
C 684	7.6	42.2	30	10	CZ474737	CZ474737 d05808-5P	757	7.4	41.1	24	9	AZ331582	AZ331582 IM0059P06
C 685	7.6	42.2	30	10	CZ474737	CZ474737 d05808-5P	758	7.4	41.1	24	9	AZ346795	AZ346795 IM0082N09
C 686	7.6	42.2	30	10	CZ479750	CZ479750 e01940-5P	759	7.4	41.1	24	9	AZ392919	AZ392919 IM0155E16
C 687	7.6	42.2	30	10	CZ489884	CZ489884 f07110-5P	760	7.4	41.1	24	9	AZ492799	AZ492799 IM0337B10
C 688	7.6	42.2	30	10	CZ490693	CZ490693 f08002-5P	761	7.4	41.1	24	9	AZ500040	AZ500040 IM0338K07
C 689	7.6	42.2	30	10	CZ490693	CZ490693 f08002-5P	762	7.4	41.1	24	9	AZ500040	AZ500040 IM0338K07
C 690	7.6	42.2	30	10	CZ490693	CZ490693 f08002-5P	763	7.4	41.1	24	9	AZ500040	AZ500040 IM0338K07
C 691	7.4	41.1	12	1	AJ654489	AJ654489 AJ654489	764	7.4	41.1	24	11	TA294G03P	TA294G03 T. brucei
C 692	7.4	41.1	12	6	CF317270	CF317270 HD--06-01	765	7.4	41.1	25	1	AA868839	AA868839 aK54904.8
C 693	7.4	41.1	13	6	BM395672	BM395672 5009-0-1-	766	7.4	41.1	25	1	AA938266	AA938266 0097601.s
C 694	7.4	41.1	14	8	DN988598	DN988598 ZEBRA.28R	767	7.4	41.1	25	1	AI049424	AI049424 ub33f08.r
C 695	7.4	41.1	15	5	BO591870	BO591870 E0125E1-0	768	7.4	41.1	25	1	AI394683	AI394683 C924D07.x
C 696	7.4	41.1	17	10	CL652474	CL652474 PRI01144-	769	7.4	41.1	25	1	AI762402	AI762402 wh65610.x
C 697	7.4	41.1	18	6	CF306437	CF306437 HDAL--03-	770	7.4	41.1	25	1	AJ647083	AJ647083 AJ647083
C 698	7.4	41.1	18	10	AJ587905	AJ587905 Arabidops	771	7.4	41.1	25	1	AJ659558	AJ659558 AJ659558
C 699	7.4	41.1	19	1	AA912825	AA912825 o143d11.s	772	7.4	41.1	25	3	BM398453	BM398453 5009-0-45
C 700	7.4	41.1	19	6	CF306225	CF306225 HDAL--03-	773	7.4	41.1	25	6	CF329185	CF329185 NACL--04-
C 701	7.4	41.1	19	8	DR065340	DR065340 jP93d11.g	774	7.4	41.1	25	9	AO025268	AO025268 EP(3)3087
C 702	7.4	41.1	19	9	AZ323931	AZ323931 IM0045F09	775	7.4	41.1	25	9	AZ479489	AZ479489 IM0300H08
C 703	7.4	41.1	19	9	AZ509071	AZ509071 IM0351A21	776	7.4	41.1	25	9	AZ621173	AZ621173 IM0454B17
C 704	7.4	41.1	19	9	AZ785819	AZ785819 2M0030F04	777	7.4	41.1	25	9	AZ765197	AZ765197 IM0562E05
C 705	7.4	41.1	20	1	AV735727	AV735727 AV735727	778	7.4	41.1	25	9	AZ845871	AZ845871 2M0145B19
C 706	7.4	41.1	20	9	AZ313204	AZ313204 IM0029P19	779	7.4	41.1	25	9	AZ944762	AZ944762 2M0205N19
C 707	7.4	41.1	20	9	AZ321845	AZ321845 IM0042A07	780	7.4	41.1	25	9	AZ953702	AZ953702 2M0219M03
C 708	7.4	41.1	20	9	AZ797468	AZ797468 2M0053P09	781	7.4	41.1	25	9	BZ596571	BZ596571 SALK 0927
C 709	7.4	41.1	20	9	AZ802167	AZ802167 2M0061A07	782	7.4	41.1	25	10	AC189863	AC189863 Pan trogl
C 710	7.4	41.1	20	9	AZ819520	AZ819520 2M0091N07	783	7.4	41.1	25	10	CG714033	CG714033 1119034F0
C 711	7.4	41.1	21	3	BM397925	BM397925 5009-0-39	784	7.4	41.1	25	10	CG721257	CG721257 111906B80
C 712	7.4	41.1	21	9	AZ450829	AZ450829 IM0249E13	785	7.4	41.1	25	10	CG723016	CG723016 1119074D0
C 713	7.4	41.1	21	9	AZ765823	AZ765823 IM0563A05	786	7.4	41.1	25	10	CL657591	CL657591 PRI012A.A
C 714	7.4	41.1	21	9	AZ836049	AZ836049 2M0130E11	787	7.4	41.1	25	11	TA119H11P	TA119H11 T. brucei
C 715	7.4	41.1	21	11	TA45EB0Q	TA45EB0Q	788	7.4	41.1	25	11	TA190RH5Q	TA190RH5 T. brucei
C 716	7.4	41.1	22	1	AJ016967	AJ016967 ou27H03.x	789	7.4	41.1	26	1	AJ661394	AJ661394 AJ661394
C 717	7.4	41.1	22	1	AJ679603	AJ679603 AJ679603	790	7.4	41.1	26	6	CD743702	CD743702 IRB21_E02
C 718	7.4	41.1	22	3	BM398778	BM398778 5009-0-5-	791	7.4	41.1	26	8	R50496	R50496 YJ60d06.s1
C 719	7.4	41.1	22	3	BM398778	BM398778 5009-0-5-	792	7.4	41.1	26	9	AZ314210	AZ314210 IM0030H23
C 720	7.4	41.1	22	6	CD528575	CD528575 03F13 A1a	793	7.4	41.1	26	9	AZ376102	AZ376102 IM0245D07
C 721	7.4	41.1	22	6	CF298737	CF298737 7LEAF--02	794	7.4	41.1	26	9	AZ447792	AZ447792 IM0288F03
C 722	7.4	41.1	22	8	CV933714	CV933714 PMPCm.37	795	7.4	41.1	26	9	AZ472665	AZ472665 IM0302D24
C 723	7.4	41.1	22	8	DR106864	DR106864 JHU124H05	796	7.4	41.1	26	9	AZ480667	AZ480667 IM0302D24
C 724	7.4	41.1	22	8	DR108533	DR108533 JHU166D08	797	7.4	41.1	26	9	AZ599412	AZ599412 IM0414B17
C 725	7.4	41.1	22	9	AZ311109	AZ311109 IM002SE21	798	7.4	41.1	26	9	AZ763044	AZ763044 IM0558P17
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C 727	7.4	41.1	22	9	AZ779122	AZ779122 2M0015M03	800	7.4	41.1	26	9	AZ795959	AZ795959 2M0051O24
C 728	7.4	41.1	22	9	AZ796284	AZ796284 2M0051O21	801	7.4	41.1	26	9	AZ825865	AZ825865 2M0101J14
C 729	7.4	41.1	22	9	AZ799747	AZ799747 2M0057E19	802	7.4	41.1	26	9	AZ827589	AZ827589 2M0104D07
C 730	7.4	41.1	22	9	AZ803482	AZ803482 2M0063123	803	7.4	41.1	26	9	AZ841913	AZ841913 2M0140I04
C 731	7.4	41.1	22	9	AZ854947	AZ854947 2M0158I18	804	7.4	41.1	26	10	CZ472275	CZ472275 d01505-3P
C 732	7.4	41.1	22	9	AZ876923	AZ876923 2M0192D07	805	7.4	41.1	26	11	H5TERA0309	H5TERA03 H.sapiens t
C 733	7.4	41.1	22	10	CZ442359	CZ442359 ID26C11.f	806	7.4	41.1	27	3	BM392622	BM392622 50071-2-1
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C 736	7.4	41.1	22	11	TA171F12P	TA171F12P	809	7.4	41.1	27	8	CO784434	CO784434 BL280C.G1
C 737	7.4	41.1	23	1	AU259528	AU259528 T. brucei	810	7.4	41.1	27	8	DR106962	DR106962 JHU128D01
C 738	7.4	41.1	23	1	AU259528	AU259528 T. brucei	811	7.4	41.1	27	8	DR106962	DR106962 JHU128D01
C 739	7.4	41.1	23	3	BM397206	BM397206 5009-0-62	812	7.4	41.1	27	9	AZ355387	AZ355387 IM0095J01
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C 742	7.4	41.1	23	9	AZ333204	AZ333204 IM0062J11	815	7.4	41.1	27	9	AZ868893	AZ868893 2M0180I17
C 743	7.4	41.1	23	9	AZ445288	AZ445288 IM0241C06	816	7.4	41.1	27	10	CZ467522	CZ467522 c01875-3P
C 744	7.4	41.1	23	9	AZ465625	AZ465625 IM0269C11	817	7.4	41.1	27	10	CZ467540	CZ467540 c01894-3P
C 745	7.4	41.1	23	9	AZ785578	AZ785578 2M0182N01	818	7.4	41.1	27	10	CG108799	CG108799 Pan trogl
C 746	7.4	41.1	23	9	AZ869816	AZ869816 2M0182N06	819	7.4	41.1	27	10	CG110879	CG110879 Pan trogl
C 747	7.4	41.1	23	9	AZ945654	AZ945654 2M0207C10	820	7.4	41.1	27	10	CG113831	CG113831 1119033F0
C 748	7.4	41.1	23	9	AZ958029	AZ958029 2M0225D11	821	7.4	41.1	27	10	CG113867	CG113867 1119033H0
C 749	7.4	41.1	23	9	AZ990646	AZ990646 2M0274A03	822	7.4	41.1	27	10	CG721048	CG721048 1119065B0
C 750	7.4	41.1	23	11	TA174H12Q	TA174H12Q	823	7.4	41.1	27	10	CG128108	CG128108 1119065B0
C 751	7.4	41.1	23	11	TA178H03P	TA178H03P	824	7.4	41.1	27	10	CL983136	CL983136 GC0375.TI
C 752	7.4	41.1	23	11	TA62A10Q	TA62A10Q	825	7.4	41.1	27	10	CW020477	CW020477 GC0744.TI

C 826	7.4	41.1	28 1	AA871664	AA871664 vq39d05.r	C 899	7.4	41.1	30 11	TA351F12Q	AL496886 T. brucei
827	7.4	41.1	28 1	AA180766	AA180766 ub76a11.r	C 900	7.2	40.0	12 3	BM401056	BM401056 5009-0-82
C 828	7.4	41.1	28 1	AA072972	AA072972 mm80e03.r	C 901	7.2	40.0	13 3	BM398081	BM398081 5009-0-40
C 829	7.4	41.1	28 1	AI701242	AI701242 wc60b12.x	C 902	7.2	40.0	13 3	BM399216	BM399216 5009-0-55
C 830	7.4	41.1	28 1	AJ729913	AJ729913 AJ729913	C 903	7.2	40.0	13 3	BQ582041	BQ582041 E012636-0
C 831	7.4	41.1	28 3	BM395617	BM395617 5009-0-1-	C 904	7.2	40.0	13 5	BQ594526	BQ594526 E012443-0
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C 834	7.4	41.1	28 9	AZ438215	AZ438215 1M0228K12	C 907	7.2	40.0	15 1	AJ666289	AJ666289 AJ666289
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C 836	7.4	41.1	28 9	AZ615744	AZ615744 1M045815	C 909	7.2	40.0	15 3	BM396889	BM396889 5009-0-26
C 837	7.4	41.1	28 9	AZ632301	AZ632301 1M0486C23	C 910	7.2	40.0	15 3	BM397483	BM397483 5009-0-33
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C 841	7.4	41.1	28 10	CZ476119	CZ476119 d08202-5p	C 914	7.2	40.0	15 3	BM398945	BM398945 5009-0-50
C 842	7.4	41.1	28 10	CZ917814	CZ917814 4021007A1	C 915	7.2	40.0	15 3	BM400226	BM400226 5009-0-7-
C 843	7.4	41.1	28 10	CG714400	CG714400 1119036E0	C 916	7.2	40.0	15 3	BM400553	BM400553 5009-0-75
C 844	7.4	41.1	28 11	TA65A11P	AL457351 T. brucei	C 917	7.2	40.0	15 3	BM400635	BM400635 5009-0-76
C 845	7.4	41.1	29 3	BM396230	BM396230 5009-0-19	C 918	7.2	40.0	15 3	BM401092	BM401092 5009-0-82
C 846	7.4	41.1	29 8	CV933947	CV933947 PMrpm 51	C 919	7.2	40.0	15 8	CX001096	CX001096 iv39a12.b
C 847	7.4	41.1	29 9	AZ315608	AZ315608 1M0032G23	C 920	7.2	40.0	16 1	AJ660752	AJ660752 AJ660752
C 848	7.4	41.1	29 9	AZ323903	AZ323903 1M0045A07	C 921	7.2	40.0	16 3	BM395722	BM395722 5009-0-10
C 849	7.4	41.1	29 9	AZ509082	AZ509082 1M0351C21	C 922	7.2	40.0	16 3	BM396708	BM396708 5009-0-24
C 850	7.4	41.1	29 9	AZ804761	AZ804761 2M0065B02	C 923	7.2	40.0	16 3	BM396892	BM396892 5009-0-26
C 851	7.4	41.1	29 9	BH911866	BH911866 SALK_0726	C 924	7.2	40.0	16 3	BM397238	BM397238 5009-0-3-
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C 853	7.4	41.1	29 10	CZ472019	CZ472019 d01085-5p	C 926	7.2	40.0	16 3	BM397837	BM397837 5009-0-37
C 854	7.4	41.1	29 10	CZ474108	CZ474108 d04746-5p	C 927	7.2	40.0	16 3	BM397868	BM397868 5009-0-38
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C 856	7.4	41.1	29 10	CZ475851	CZ475851 d07641-3p	C 929	7.2	40.0	16 3	BM398253	BM398253 5009-0-42
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C 858	7.4	41.1	30 1	AJ668956	AJ668956 AJ668956	C 931	7.2	40.0	16 3	BM400104	BM400104 5009-0-66
C 859	7.4	41.1	30 1	AJ794203	AJ794203 AJ794203	C 932	7.2	40.0	16 3	BM400259	BM400259 5009-0-70
C 860	7.4	41.1	30 1	AV860533	AV860533 AV860533	C 933	7.2	40.0	16 3	BM400802	BM400802 5009-0-79
C 861	7.4	41.1	30 2	B1153943	B1153943 602870782	C 934	7.2	40.0	16 3	BM401104	BM401104 5009-0-82
C 862	7.4	41.1	30 3	BM393952	BM393952 50072-2-1	C 935	7.2	40.0	16 3	BM401175	BM401175 5009-0-83
C 863	7.4	41.1	30 3	BM396904	BM396904 5009-0-26	C 936	7.2	40.0	16 3	BM401274	BM401274 5009-0-85
C 864	7.4	41.1	30 3	BM400275	BM400275 5009-0-70	C 937	7.2	40.0	16 5	BQ582176	BQ582176 E012696-0
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C 866	7.4	41.1	30 6	CF311738	CF311738 ABR--07-C	C 939	7.2	40.0	17 3	BM395724	BM395724 5009-0-10
C 867	7.4	41.1	30 6	CF313400	CF313400 HD--01-I0	C 940	7.2	40.0	17 3	BM395793	BM395793 5009-0-11
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C 869	7.4	41.1	30 6	CF314237	CF314237 HD--02-K2	C 942	7.2	40.0	17 3	BM396976	BM396976 5009-0-27
C 870	7.4	41.1	30 6	CF314484	CF314484 HD--03-A1	C 943	7.2	40.0	17 3	BM397034	BM397034 5009-0-28
C 871	7.4	41.1	30 6	CF316772	CF316772 HD--06-D0	C 944	7.2	40.0	17 3	BM397301	BM397301 5009-0-30
C 872	7.4	41.1	30 6	CF317266	CF317266 HD--06-O1	C 945	7.2	40.0	17 3	BM397359	BM397359 5009-0-31
C 873	7.4	41.1	30 6	CF317281	CF317281 HD--06-O1	C 946	7.2	40.0	17 3	BM397465	BM397465 5009-0-33
C 874	7.4	41.1	30 6	CF330843	CF330843 NACL--06-	C 947	7.2	40.0	17 3	BM397514	BM397514 5009-0-33
C 875	7.4	41.1	30 6	CF337208	CF337208 JMT--07-J	C 948	7.2	40.0	17 3	BM397795	BM397795 5009-0-37
C 876	7.4	41.1	30 9	AZ327043	AZ327043 1M0050M11	C 949	7.2	40.0	17 3	BM397800	BM397800 5009-0-37
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C 878	7.4	41.1	30 9	AZ582016	AZ582016 1M0374C01	C 951	7.2	40.0	17 3	BM398513	BM398513 5009-0-46
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C 880	7.4	41.1	30 9	AZ599452	AZ599452 1M0414K15	C 953	7.2	40.0	17 3	BM398896	BM398896 5009-0-50
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c 994 7.2 40.0 19 1 A1318366 A1318366 5009-0-85
c 995 7.2 40.0 19 1 A1584018 A1584018 5009-0-10
c 996 7.2 40.0 19 3 BM395679 BM395679 5009-0-10
c 997 7.2 40.0 19 3 BM395733 BM395733 5009-0-10
c 998 7.2 40.0 19 3 BM395769 BM395769 5009-0-11
c 999 7.2 40.0 19 3 BM395792 BM395792 5009-0-11
c1000 7.2 40.0 19 3 BM396403 BM396403 5009-0-20

```

## ALIGNMENTS

```

RESULT 1          30 bp  DNA  linear  GSS 13-DEC-2000
TA341A10Q/c      T. brucei sheared genomic DNA clone 341a10, reverse sequence,
LOCUS            TA341A10Q
DEFINITION      Genomic survey sequence.
ACCESSION      AL493292
VERSION        AL493292.1  GI:11869205
KEYWORDS        GSS.
SOURCE          Trypanosoma brucei
ORGANISM        Trypanosoma brucei
                Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
                Trypanosoma.

```

## REFERENCE

## AUTHORS

## TITLE

## JOURNAL

1 (bases 1 to 30)  
Hall, N., Bowman, S., Lennard, N.J., Doggett, J., Atkin, R.,  
Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,  
Melville, S.E., Rajandream, M.A. and Barrell, B.G.  
Direct Submission  
Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing  
project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,  
Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and  
nhl@sanger.ac.uk  
Constructed at the Institute for Genomic Research (TIGR),  
Rockville, MD. Genomic DNA isolated from a cloned population of  
Trypanosoma brucei (TRBU927/4 G0H4 10.1) was mechanically sheared  
to give a tight size distribution (4 kb). The v + i method used for the library construction is  
described in detail in Smith, H. and Venter, J.C. (Making small  
insert libraries for whole genome shotgun sequencing projects. In  
Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.  
Barrell, Oxford University Press, 1999).  
Email: nhlsayed@tigr.org  
Details of T. brucei sequencing at the Sanger Centre are available  
at [http://www.sanger.ac.uk/Projects/T\\_brucei/](http://www.sanger.ac.uk/Projects/T_brucei/).

## FEATURES

## Source

```

1..30
/organism="Trypanosoma brucei"
/mol_type="genomic DNA"
/strain="TRBU927"
/db_xref="taxon:5691"

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## ORIGIN

/clone="341a10"

Query Match 76.7% Score 13.8; DB 11; Length 30;  
Best Local Similarity 88.2% Pred. No. 3 4e+04;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

## Qy

```

1 TCTCCAGCGTCGCCA 17
|||
25 TCACCAGCGTCGTC 9

```

Db 25 TCACCAGCGTCGTC 9

## RESULT 2

```

A2305158          21 bp  DNA  linear  GSS 29-SEP-2000
LOCUS            A2305158
DEFINITION      1M0005K1R Mouse 10kb plasmid UGCGM library Mus musculus genomic
clone UGCGM0005K1 R, genomic survey sequence.
ACCESSION      A2305158
VERSION        A2305158.1  GI:10341896
KEYWORDS        GSS.
SOURCE          Mus musculus (house mouse)
ORGANISM        Mus musculus
                Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
                Sciurognathi; Muridea; Muridae; Murinae; Mus.

```

## REFERENCE

## AUTHORS

## TITLE

## JOURNAL

## COMMENT

Contract: Robert B. Weiss  
University of Utah Genome Center  
University of Utah  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT  
84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunn@genetics.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0005 row: K column: 11  
Seq primer: CACACAGAAACGATGACCC  
Class: plasmid ends  
High quality sequence strip: 21.  
Location/Qualifiers

## FEATURES

## Source

```

1..21
/organism="Mus musculus"
/mol_type="genomic DNA"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UGCGM0005K11"
/sex="Male"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/clone_lib="Mouse 10kb plasmid UGCGM library"
/note="Vector: PWD42ny. Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adapted DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gel
electrophoresis. Vector DNA was prepared from a derivative
of pMD42 (gi|4732114|gb|AF129072.1), a copy-number
inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adapted mouse DNA was annealed to
adapted vector DNA, and transformed into

```

ORIGIN

chemically-competent *E. coli* XL10-Gold (Stratagene) cells  
and selected for ampicillin resistance."

Query Match 65.6%; Score 11.8; DB 9; Length 21;  
Best Local Similarity 86.7%; Pred. No. 3.3e+05;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGCG 15  
1 TCTCCCTGCGTCCGC 15

RESULT 3  
AA961707/c 25 bp mRNA linear EST 27-AUG-1998  
LOCUS or44e08.81 NCI CGAP GC3 Homo sapiens CDNA clone IMAGE:1598342 3,  
DEFINITION similar to SW:SN2\_HUMAN P51532 POSSIBLE GLOBAL TRANSCRIPTION  
ACTIVATOR SNF2L4; contains TARI.t2 TARI repetitive element ;, mRNA  
sequence.

ACCESSION AA961707 GI:3133871  
VERSION AA961707  
KEYWORDS EST.  
SOURCE Homo sapiens (human)

ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Primates; Carnivora;  
Hominidae; Homo.

REFERENCE 1 (bases 1 to 25)  
NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.  
NATIONAL Cancer Institute, Cancer Genome Anatomy Project (CGAP),  
Tumor Gene Index  
Unpublished (1997)

JOURNAL  
COMMENT

Contact: Robert Strausberg, Ph.D.  
Email: cgapbs-r@mail.nih.gov  
Tissue Procurement: Christopher A. Moskaluk, M.D., Ph.D., Michael  
Emmert-Buck, M.D., Ph.D.  
CDNA Library Preparation: M. Bento Soares, Ph.D.  
DNA Sequencing by: Greg Lennon, Ph.D.  
Clone distribution: NCI-CCAP clone distribution information can be  
found through the I.M.A.G.E. Consortium/LLNL at:  
www.bio.llnl.gov/bbrp/image/image.html  
Insert length: 388 Std Error: 0.00  
Seq primer: 40m13 fwd. ET from Amersham  
High quality sequence scop: 1.  
Location/Qualifiers

FEATURES  
SOURCE

1..25  
/organism="Homo sapiens"  
/mol\_type="mRNA"  
/db\_xref="taxon:9606"  
/clone="IMAGE:1598342"  
/tissue\_type="pooled germ cell tumors"  
/lab\_host="DH10B"  
/note="Vector: pT73D-Pac (Pharmacia) with a modified  
polylinker; 1st strand CDNA was prepared from 3 pooled  
germ cell tumors, and was then primed with a Not I -  
oligo(dT) primer. Double-stranded CDNA was ligated to Eco  
RI adaptors (Pharmacia), digested with Not I and cloned  
into the Not I and Eco RI sites of the modified pT73  
vector. Library is not normalized. Library was  
constructed by Bento Soares and M. Patricia Bonaldo."

ORIGIN

Query Match 63.3%; Score 11.4; DB 1; Length 25;  
Best Local Similarity 92.3%; Pred. No. 5.2e+05;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 CCAGCGTCCGCCA 17  
17 CCAGCGTCCGCCA 17  
Db 25 CCAGCGTCCGCCA 13

RESULT 4  
CO779101/c

LOCUS CO779101 20 bp mRNA linear EST 05-AUG-2004  
DEFINITION BL005C\_F09 6-Day Axolotl Tail Blastema (6DABL) Ambystoma mexicanum  
CDNA 5' similar to hypothetical protein, mRNA sequence.

ACCESSION CO779101  
VERSION CO779101.1 GI:50995081  
KEYWORDS EST.

SOURCE Ambystoma mexicanum (axolotl)

ORGANISM

Ambystoma mexicanum  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Amphibia; Batrachia; Caudata; Salamandroidae; Ambystomatidae;  
Ambystoma.

REFERENCE 1 (bases 1 to 20)

Habermann, B., Behn, A.G., Herklitz, S., Volker, M., Eckel, K.,  
Pehle, K., Epplein, H.H., Schackert, H.K., Wiebe, G. and Tanaka, E.M.  
An Ambystoma mexicanum EST sequencing project: Analysis of 17,352  
expressed sequence tags from embryonic and regenerating blastema  
CDNA libraries

JOURNAL Genome Biol. (2004) In press  
COMMENT Contact: Ely M. Tanaka

Max Planck Institute of Molecular Cell Biology and Genetics  
Dresden  
Pfeifenhauserstrasse 108, 01307 Dresden, Germany  
Tel: 0049 351 210 2620  
Fax: 0049 351 210 1489  
Email: tanaka@mpi-cbg.de  
Plate: BL005C row: 09 column: F  
Seq primer: GCA CAT TAG GCC TAT TTA GGT GAC A.  
Location/Qualifiers

FEATURES  
SOURCE

1..20  
/organism="Ambystoma mexicanum"  
/mol\_type="mRNA"  
/db\_xref="taxon:8296"  
/tissue\_type="Tail Blastema"  
/cell\_type="regenerating tail blastema"  
/clone\_lib="6-Day Axolotl Tail Blastema (6DABL)"  
/note="Vector: pCMVSPORT6; Site 1: NotI; Site 2: SalI;  
Unnormalized CDNA plasmid library prepared by Invitrogen.  
Size fractionated mRNA was polyA primed and cloned into  
NotI-SalI site of pCMVSPORT6. Bacterial host is  
EMDH10B-TONA. Average insert size is 1.67 KB.  
TAG\_LIB=6DABL"

ORIGIN

Query Match 58.9%; Score 10.6; DB 7; Length 20;  
Best Local Similarity 76.5%; Pred. No. 1.3e+06;  
Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 CTCGCCAGCGTGGCCAT 18  
17 CTCGCCAGCGTGGCCAT 1

RESULT 5  
TASFP9P/c

LOCUS TASFP9P/c 24 bp DNA linear GSS-13-DEC-2000  
DEFINITION T. brucei sheared genomic DNA clone 5f09, forward sequence, genomic  
survey sequence.

ACCESSION AL452298  
VERSION AL452298.1 GI:11857841  
KEYWORDS GSS.

SOURCE

Trypanosoma brucei  
Trypanosoma brucei  
Eukaryota; Euklenozoa; Kinetoplastida; Trypanosomatidae;

REFERENCE

1 (bases 1 to 24)  
Hall, N., Bowman, S., Leonard, N.J., Doggett, J., Atkin, R.,  
Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,  
Melville, S.E., Rajandream, M.A. and Barrell, B.G.  
Direct Submission

```

JOURNAL
Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
nhi@sanger.ac.uk
Constructed at the Institute for Genomic Research (TIGR),
Rockville, MD. Genomic DNA isolated from a cloned population of
Trypanosoma brucei (TREU927/4 CUTat 10.1) was mechanically sheared
to give a tight size distribution (
4 kb). The v + i method used for the library construction is
described in detail in Smith, H. and Venter, J.C. (Making small
insert libraries for whole genome shotgun sequencing projects. In
Genome Sequencing: A Practical Approach, eds. M. Vaubin and B.
Barrell, Oxford University Press, 1999).
Email: nelsayed@tigr.org
Details of T. brucei sequencing at the Sanger Centre are available
at http://www.sanger.ac.uk/Projects/T\_brucei/.
Location/Qualifiers
1. 24
/organism="Trypanosoma brucei"
/mol_type="genomic DNA"
/strain="TREU927"
/db_xref="taxon:5691"
/clone="5f09"

ORIGIN
Query Match 58.9%; Score 10.6; DB 1; Length 24;
Best Local Similarity 76.5%; Pred. No. 1.3e+06;
Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGCACCA 17
||| ||| ||| ||| |||
20 TCTACCGAGTGTGCCA 4

RESULT 6
AUX55658 26 bp mRNA linear EST 25-APR-2002
LOCUS AUX55658 3'-directed mouse cDNA library Mus musculus cDNA clone
DEFINITION BED0006030 3', mRNA sequence.
ACCESSION AUX55658
VERSION AUX55658.1 GI:20318610
KEYWORDS EST.
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Murioidea; Muridae; Murinae; Mus.
1 (bases 1 to 26)
Kato, K. and Matoba, R.
Generation of expressed sequence tags from mouse brain
Unpublished (2002)
Contact: Rikuya Kato
Graduate School of Biological Sciences
Nara Institute of Science and Technology
8916-5 Takayama, Ikoma, Nara 630-0101, Japan
Tel: 81-743-72-5581
Fax: 81-743-72-5589
Email: kkatobs@is.tnara.ac.jp,
URL: http://love2.aist-nara.ac.jp/BED/index.html.
Location/Qualifiers
1. 26
/organism="Mus musculus"
/mol_type="mRNA"
/db_xref="taxon:10090"
/clone="BED0006030"
/tissue_type="brain"
/clone_lib="3'-directed mouse cDNA library"

FEATURES
source

ORIGIN
Query Match 58.9%; Score 10.6; DB 1; Length 26;
Best Local Similarity 76.5%; Pred. No. 1.3e+06;
Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0

```

```

OY      1 TTTCCCGAGCTGCGCCA 17
        |||||
LOCUS   A2788334/c
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
FEATURES
    source
        /organism="Mus musculus"
        /mol_type="genomic DNA"
        /strain="C57BL/6J"
        /db_xref="taxon:10090"
        /clone="U06C2M0035B19"
        /sex="Male"
        /lab_host="E. Coli strain XL10-Gold, TI-resistant, F-"
        /clone_lib="Mouse 10kb plasmid U06C1M library"
        /note="Vector: pMD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adaptored DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gel
electrophoresis. Vector DNA was prepared from a derivative
of pMD42 [gi|4732114|gb|AF129072.1] a copy-number
inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adaptored mouse DNA was annealed to
adaptored vector DNA, and transformed into
chemically-competent E. coli XL10-Gold (Stratagene) cells
and selected for ampicillin resistance."
ORIGIN
Query Match          57.8%; Score 10.4; DB 9; Length 30;
Best Local Similarity 91.7%; Pred. No. 1.7e+06;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```



Qy 4 CCCAGCGTGGC 15  
 Db 16 CCCAGCGTGGC 5

RESULT 8  
 A2799747 22 bp DNA linear GSS 16-FEB-2001  
 LOCUS 2M0057E19F Mouse 10kb plasmid library Mus musculus genomic  
 DEFINITION clone UNGC2M0057E19 F, genomic survey sequence.  
 ACCESSION A2799747  
 VERSION A2799747.1 GI:12951174  
 KEYWORDS GSS.  
 SOURCE Mus musculus (house mouse)  
 ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
 Sciurognathi; Muridae; Muridae; Murinae; Mus.  
 1 (bases 1 to 22)  
 Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,  
 Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,  
 Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von  
 Niederhausen, A. and Wright, D., Weiss, R.  
 Mouse whole genome scaffolding with paired end reads from 10kb  
 plasmid inserts  
 Unpublished (2000)  
 CONTACT: Robert B. Weiss  
 University of Utah Genome Center  
 University of Utah  
 Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT  
 84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: dunn@genetics.utah.edu  
 Insert Length: 10000 Std Error: 0.00  
 Plate: 0057 row: E column: 19  
 Seq primer: CGTTGTAAACGACGCGCAGT  
 Class: plasmid ends  
 High quality sequence stop: 22.

FEATURES  
 source  
 1..22  
 Location/Qualifiers  
 /organism="Mus musculus"  
 /mol\_type="genomic DNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="UNG2M0057E19"  
 /sex="Male"  
 /lab\_host="E. Coli strain XL10-Gold, TI-resistant, F-"  
 /clone\_lib="Mouse 10kb plasmid UNGC1M library"  
 /note="Vector: PMD42nv; Purified genomic DNA from M.  
 musculus C57BL/6J (male) was obtained from the Jackson  
 Laboratory Mouse DNA Resource  
 (http://www.jax.org/resources/documents/dnares/). The DNA  
 was hydrodynamically sheared by repeated passage through a  
 0.005 inch orifice at constant velocity. The sheared DNA  
 was blunt end-repaired with T4 DNA polymerase and T4  
 polynucleotide kinase. Adaptor oligonucleotides were  
 ligated to the blunt ends in high molar excess. The  
 adaptor DNA was purified and size-selected for a 9.5 to  
 10.5 kb range using preparative agarose gel  
 electrophoresis. Vector DNA was prepared from a derivative  
 of pMD42 (gi|4732114|gb|AF12072.1), a copy-number was ligated  
 with adaptor complementary to the insert adaptors and  
 purified. The sheared, adaptor mouse DNA was annealed to  
 adaptor vector DNA, and transformed into  
 chemically-competent E. coli XL10-Gold (Stratagene) cells  
 and selected for ampicillin resistance."

ORIGIN  
 Query Match 56.7%; Score 10.2; DB 9; Length 22;  
 Best Local Similarity 80.0%; Pred. No. 2e+06;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 1 TCTCCAGCGTGGC 15  
 Db 6 TCGCCAGCGTGGC 20

RESULT 9  
 TA353D06P/c  
 LOCUS 3T353D06P  
 DEFINITION T. brucei sheared genomic DNA clone 353d06, forward sequence,  
 genomic survey sequence.  
 ACCESSION AL494462  
 VERSION AL494462.1 GI:11870919  
 KEYWORDS GSS.  
 SOURCE Trypanosoma brucei  
 ORGANISM Trypanosoma brucei  
 Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;  
 Trypanosoma.  
 1 (bases 1 to 22)  
 Hall, N., Bowman, S., Leonard, N.J., Doggett, J., Atkin, R.,  
 Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,  
 Melville, S.E., Rajandream, M.A. and Barrell, B.G.  
 Direct Submision  
 Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing  
 project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,  
 Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and  
 nhls@sanger.ac.uk  
 Constructed at the Institute for Genomic Research (TIGR),  
 Rockville, MD. Genomic DNA isolated from a cloned population of  
 Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared  
 to give a tight size distribution (4 kb). The v + i method used for the library construction is  
 described in detail in Smith, K. and Venter, J.C. (Making small  
 insert libraries for whole genome shotgun sequencing projects. In  
 Genome Sequencing: A Practical Approach, eds. M. Vaubin and B.  
 Barrell, Oxford University Press, 1999).  
 Email: nelsayed@tigr.org  
 Details of T. brucei sequencing at the Sanger Centre are available  
 at http://www.sanger.ac.uk/Projects/T\_brucei/.

FEATURES  
 source  
 1..22  
 Location/Qualifiers  
 /organism="Trypanosoma brucei"  
 /mol\_type="genomic DNA"  
 /strain="TREU927"  
 /db\_xref="taxon:5691"  
 /clone="353d06"

ORIGIN  
 Query Match 56.7%; Score 10.2; DB 11; Length 22;  
 Best Local Similarity 80.0%; Pred. No. 2e+06;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 3 TCCAGCGTGGC 17  
 Db 17 TCCAGCGTGGC 3

RESULT 10  
 C2474521  
 LOCUS 30 bp DNA linear GSS 29-APR-2005  
 DEFINITION d05425-3prtime Exelixis P element XP insertions Drosophila  
 melanogaster genomic Sequence recovered from 3' end of P element,  
 genomic survey sequence.  
 ACCESSION C2474521  
 VERSION C2474521.1 GI:62968534  
 KEYWORDS GSS.  
 SOURCE Drosophila melanogaster (fruit fly)  
 ORGANISM Drosophila melanogaster  
 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;  
 Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;  
 Ephydroidea; Drosophilidae; Drosophila.  
 1 (bases 1 to 30)



## COMMENT

Project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton, Cambridge CB10 1SA, E-mail: barrrell@sanger.ac.uk and nh@sanger.ac.uk  
Constructed at the Institute for Genomic Research (TIGR), Rockville, MD. Genomic DNA isolated from a cloned population of *Trypanosoma brucei* (TREU927/4 GOTat 10.1) was mechanically sheared to give a tight size distribution (4 kb). The v + i method used for the library construction is described in detail in Smith, H. and Venter, J.C. (Making small insert libraries for whole genome shotgun sequencing projects. In Genome Sequencing: A Practical Approach, eds. M. Vaudin and B. Barrrell, Oxford University Press, 1999).  
Email: nleayed@tigr.org  
Details of T. brucei sequencing at the Sanger Centre are available at [http://www.sanger.ac.uk/Projects/T\\_brucei/](http://www.sanger.ac.uk/Projects/T_brucei/).

## FEATURES

source  
Location/Qualifiers

1..24  
/organism="Trypanosoma brucei"  
/mol\_type="genomic DNA"  
/strain="TREU927"  
/db\_xref="taxon:5691"  
/clone="386g12"

## ORIGIN

Query Match 55.6%; Score 10; DB 11; Length 24;  
Best Local Similarity 100.0%; Pred. No. 2.6e+06;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CAGCGTGGCC 15  
|||||||  
11 CAGCGTGGCC 20

Db 11 CAGCGTGGCC 20

## RESULT 13

LOCUS CL657390 25 bp DNA linear GSS 09-JUL-2004  
DEFINITION PRI0129B.G06 - PRI0129B.B21 (25) Mixed stage fosmid library of P. pacificus var. California *Pristionchus pacificus* genomic, genomic survey sequence.

ACCESSION CL657390 GI:50138903  
VERSION GSS.  
KEYWORDS  
SOURCE  
ORGANISM

*Pristionchus pacificus*  
*Pristionchus pacificus*  
Eukaryota; Metazoa; Nematoda; Chromadorea; Diplogasterida;  
Neodiplogasteridae; *Pristionchus*.

REFERENCE 1 (bases 1 to 25)  
Srinivasan, J., Otto, G.W., Kahlow, U., Geisler, R. and Sommer, R.J.

ApadB: an Acedb database for the nematode satellite organism *Pristionchus pacificus*

JOURNAL Nucleic Acids Res. 32 (1), D421-D422 (2004)

## COMMENT

1461447  
Contact: Sommer RJ  
Evolutionary Biology  
Max-Planck-Institute for Developmental Biology  
Spemannstr. 37-39, Tuebingen D-72076, Germany  
Tel: 00497071601371  
Fax: 00497071601498  
Email: raf.sommer@tuebingen.mpg.de  
This library was generated at Caltech, Pasadena, USA and end  
sequenced at Vancouver, Canada.  
Seq primer: T7  
Class: fosmid ends.

FEATURES  
source  
Location/Qualifiers

1..25  
/organism="Pristionchus pacificus"  
/mol\_type="genomic DNA"  
/strain="California"  
/db\_xref="taxon:54126"  
/clone\_lib="Mixed stage fosmid library of P. pacificus var. California"  
/note="Vector: pBpifos-5 Fosmid vector"

## ORIGIN

Query Match 55.6%; Score 10; DB 10; Length 25;  
Best Local Similarity 72.2%; Pred. No. 2.6e+06;  
Matches 13; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGGCCAT 18  
|||||||  
3 TTTCCTGCTCAGCCAT 20

Db 3 TTTCCTGCTCAGCCAT 20

## RESULT 14

AZ814137 26 bp DNA linear GSS 20-FEB-2001  
LOCUS 2M0081B16R Mouse 10kb plasmid UGCGM library Mus musculus genomic  
DEFINITION clone UGCGM0081B16 R, genomic survey sequence.

ACCESSION AZ814137 GI:12984057  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM

*Mus musculus* (house mouse)  
Mus musculus  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathi; Muridae; Muridae; Murinae; Mus.

## REFERENCE

AUTHORS Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Rellly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Weiss, R.  
Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts  
Unpublished (2000)  
Contact: Robert B. Weiss  
University of Utah Genome Center  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT 84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunn@genetics.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0081 row: B column: 16  
Seq primer: CACACGAGAAACAGCTATGACC  
Class: plasmid ends  
High quality sequence stop: 26.

## JOURNAL

COMMENT

## FEATURES

source

Location/Qualifiers  
1..26  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UGCGM0081B16"  
/sex="Male"  
/lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
/clone\_lib="Mouse 10kb plasmid UGCGM library"  
/note="Vector: PMD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (<http://www.jax.org/resources/documents/dnares/>). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of PMD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."



ORIGIN

chemically-competent E. coli XL10-Gold (Stratagene) cells  
and selected for ampicillin resistance."

Query Match 54.4%; Score 9.8; DB 9; Length 20;  
Best Local Similarity 84.6%; Pred. No. 3.2e+06;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 TCCAGCGTGGCG 15  
15 TTCCAGCATGCGC 3

RESULT 17  
AZ607907  
LOCUS 21 bp DNA linear GSS 13-DEC-2000  
DEFINITION 1M0930A12R Mouse 10kb plasmid UUGC1M library Mus musculus genomic  
clone UUGC1M0430A12 R, genomic survey sequence.  
ACCESSION AZ607907  
VERSION AZ607907.1 GI:11730097  
KEYWORDS GSS.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathi; Muridea; Muridae; Murinae; Mus.  
REFERENCE 1 (bases 1 to 21)  
Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,  
Islam, H., Longacre, S., Mahmood, M., Meenen, E., Pedersen, T.,  
Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von  
Niederhausern, A. and Wright, D., Weiss, R.  
Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
Unpublished (2000)  
JOURNAL Contact: Robert B. Weiss  
COMMENT University of Utah Genome Center  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT  
84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunn@genetics.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0430 row: A column: 12  
Seq primer: CACACAGGAACGCTATGACC  
Class: plasmid ends  
High quality sequence stop: 21.  
Location/Qualifiers  
1. 21  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UUGC1M0430A12"  
/sex="Male"  
/lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
/clone\_1ib="Mouse 10kb plasmid UUGC1M library"  
/note="Vector: PWD42nv; Purified genomic DNA from M.  
musculus C57BL/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource  
(http://www.jax.org/resources/documents/dnares/). The DNA  
was hydrodynamically sheared by repeated passage through a  
0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end-repaired with T4 DNA polymerase and T4  
polynucleotide kinase. Adaptor oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adaptor DNA was purified and size-selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of PWD42 (GI|4732114|gb|AF129072.1), a copy-number  
inducible derivative of plasmid R1. The vector was ligated  
with adaptors complementary to the insert adaptors and  
purified. The sheared, adaptor mouse DNA was annealed to

## ORIGIN

adaptor mouse DNA, and transformed into  
chemically-competent E. coli XL10-Gold (Stratagene) cells  
and selected for ampicillin resistance."

Query Match 54.4%; Score 9.8; DB 9; Length 21;  
Best Local Similarity 84.6%; Pred. No. 3.2e+06;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 CCAGCGTGGCGCA 17  
4 CCAGCGGCGCGCA 16

RESULT 18  
AZ797482/c  
LOCUS 23 bp DNA linear GSS 16-FEB-2001  
DEFINITION 2M0053B18R Mouse 10kb plasmid UUGC1M library Mus musculus genomic  
clone UUGC2M0053B18 R, genomic survey sequence.  
ACCESSION AZ797482  
VERSION AZ797482.1 GI:12946605  
KEYWORDS GSS.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathi; Muridea; Muridae; Murinae; Mus.  
REFERENCE 1 (bases 1 to 23)  
Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,  
Islam, H., Longacre, S., Mahmood, M., Meenen, E., Pedersen, T.,  
Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von  
Niederhausern, A. and Wright, D., Weiss, R.  
Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
Unpublished (2000)  
JOURNAL Contact: Robert B. Weiss  
COMMENT University of Utah Genome Center  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT  
84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunn@genetics.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0053 row: B column: 18  
Seq primer: CACACAGGAACGCTATGACC  
Class: plasmid ends  
High quality sequence stop: 23.  
Location/Qualifiers  
1. 23  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UUGC2M0053B18"  
/sex="Male"  
/lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
/clone\_1ib="Mouse 10kb plasmid UUGC1M library"  
/note="Vector: PWD42nv; Purified genomic DNA from M.  
musculus C57BL/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource  
(http://www.jax.org/resources/documents/dnares/). The DNA  
was hydrodynamically sheared by repeated passage through a  
0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end-repaired with T4 DNA polymerase and T4  
polynucleotide kinase. Adaptor oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adaptor DNA was purified and size-selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of PWD42 (GI|4732114|gb|AF129072.1), a copy-number  
inducible derivative of plasmid R1. The vector was ligated  
with adaptors complementary to the insert adaptors and

## ORIGIN

purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically-competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match 54.4%; Score 9.8; DB 9; Length 23;  
Best Local Similarity 84.6%; Pred. No. 3.2e+06;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCTCCAGCGTGC 13  
|||||  
16 TCTCCAGCGTGC 4

Db

RESULT 19 24 bp DNA linear GSS 04-OCT-2000  
AZ448189  
LOCUS 1M0245A16R Mouse 10kb plasmid UGCGIM library Mus musculus genomic  
DEFINITION clone UGCGIM0245A16 R, genomic survey sequence.  
ACCESSION AZ448189  
VERSION AZ448189.1 GI:10600741  
KEYWORDS GSS.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathi; Muridae; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 24)  
Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,  
Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,  
Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von  
Niederhausen, A. and Wright, D. Weiss, R.

AUTHORS

TITLE Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts

JOURNAL

COMMENT

Unpublished (2000)  
Contact: Robert B. Weiss  
University of Utah Genome Center  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLIC, UT  
84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunn@genetics.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0245 row: A column: 16  
Seq primer: CACACAGAAACAGCTATGACC  
Class: plasmid ends  
High quality sequence stop: 24.  
Location/Qualifiers

## FEATURES

source

1..24  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UGCGIM0245A16"  
/sex="Male"  
/lab\_host="E. coli strain XL10-Gold, T1-resistant, F-"  
/clone\_lib="Mouse 10kb plasmid UGCGIM library"  
/note="Vector: PWD42nv; Purified genomic DNA from M.  
musculus C57BL/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource  
(http://www.jax.org/resources/documents/dnares/). The DNA  
was hydrodynamically sheared by repeated passage through a  
0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end-repaired with T4 DNA polymerase and T4  
polynucleotide kinase. Adapter oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adapted DNA was purified and size-selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of PWD42 (gi|4732114|gb|AF129072.1), a copy-number  
inducible derivative of plasmid R1. The vector was ligated

## ORIGIN

with adaptors complementary to the insert adaptors and  
purified. The sheared, adapted mouse DNA was annealed to  
adapted vector DNA, and transformed into  
chemically-competent *E. coli* XL10-Gold (Stratagene) cells  
and selected for ampicillin resistance."

Query Match 54.4%; Score 9.8; DB 9; Length 24;  
Best Local Similarity 84.6%; Pred. No. 3.2e+06;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 TCCAGCGTGC 15  
|||||  
1 TCCAGCGTGC 13

Db

RESULT 20 26 bp DNA linear GSS 23-AUG-2000  
AQ025266/c  
LOCUS EP(3)3084-5prime Drosophila melanogaster EP line Drosophila  
DEFINITION melanogaster genomic Sequence recovered from 5' end of P element,  
genomic survey sequence.  
ACCESSION AQ025266  
VERSION AQ025266.1 GI:3265618  
KEYWORDS GSS.  
SOURCE Drosophila melanogaster (fruit fly)  
ORGANISM Drosophila melanogaster  
Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;  
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;  
Ephydroidea; Drosophilidae; Drosophila.

REFERENCE 1 (bases 1 to 26)  
Liao, G.-C., Rahm, E.J. and Rubin, G.M.

AUTHORS

TITLE

JOURNAL

COMMENT

Unpublished (2000)  
Contact: Gerald Rubin  
Berkeley Drosophila Genome Project  
University of California, Berkeley  
LSA Building, Berkeley, CA 94720-3200, USA  
Fax: 5106439947  
Email: gerry@fruitfly.berkeley.edu  
Sequence recovery method was inverse PCR.  
Sequence orientation is forward strand relative to 5' end of P  
element

The P element insertion position is base 19 in the 26 bases. This  
insertion position refers to the first base of the 8 base target  
recognition sequence.

Class: transposon-tagged.  
Location/Qualifiers

## FEATURES

source

1..26  
/organism="Drosophila melanogaster"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:7227"  
/clone\_lib="Drosophila melanogaster EP line"  
/note="Inverse PCR was performed on Drosophila  
melanogaster strains each of which contains a single EP  
transposable element insertion. (The generation of these  
insertion strains is described in Korth P, Szabo K, Bailey  
A, Lavery T, Rehm J, Rubin GM, Weigmann K, Milam M, Benes  
V, Ansoorge W, Cohen SM, 1998. Systematic gain-of-function  
genetics in Drosophila. Development 6:1049-1057.) The  
resultant fragment for each strain was directly sequenced  
to determine the genomic sequence at the site of  
insertion. Details of the protocols used can be found at  
http://fruitfly.berkeley.edu/p\_disrupt/inverse\_pcr.html."

## ORIGIN

Query Match 54.4%; Score 9.8; DB 9; Length 26;  
Best Local Similarity 84.6%; Pred. No. 3.3e+06;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 CACGTCGCCCAT 18  
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 Db 23 CACGTCGACTAT 11

RESULT 21  
 AZ800963 27 bp DNA linear GSS 16-FEB-2001  
 LOCUS AZ800963/c  
 DEFINITION 2M0059C16f Mouse 10kb plasmid UUGC1M library Mus musculus genomic  
 clone UUGC2M0059C16 F, genomic survey sequence.  
 ACCESSION AZ800963  
 VERSION AZ800963.1 GI:12953286  
 KEYWORDS GSS.  
 SOURCE Mus musculus (house mouse)  
 ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
 Sciurognathi; Muroidea; Muridae; Murinae; Mus.

REFERENCE  
 1 (bases 1 to 27)  
 Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,  
 Islam, H., Longacre, S., Mahmoud, M., Meenen, B., Petersen, T.,  
 Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von  
 Niederhausen, A. and Wright, D., Weis, R.  
 Mouse whole genome scaffolding with paired end reads from 10kb  
 plasmid inserts  
 Unpublished (2000)  
 JOURNAL  
 COMMENT Contact: Robert B. Weiss  
 University of Utah Genome Center  
 University of Utah  
 Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLIC, UT  
 84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: ddunn@genetics.utah.edu  
 Insert Length: 10000 Std Error: 0.00  
 Plate: 0059 row: C column: 16  
 Seg primer: CGTTGTAAACGACGCGCACT  
 Class: plasmid ends  
 High quality sequence stop: 27.  
 Location/Qualifiers  
 1. 27  
 /organism="Mus musculus"  
 /mol\_type="genomic DNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="UUGC2M0059C16"  
 /sex="Male"  
 /lab\_host="E. Coli strain XL10-Gold, T3-resistant, F-"  
 /note="Vector: FMD42nv; Purified genomic DNA from M.  
 musculus C57BL/6J (male) was obtained from the Jackson  
 Laboratory Mouse DNA Resource  
 (http://www.jax.org/resources/documents/dnares/). The DNA  
 was hydrodynamically sheared by repeated passage through a  
 0.005 inch orifice at constant velocity. The sheared DNA  
 was blunt end-repaired with T4 DNA polymerase and T4  
 polynucleotide kinase. Adaptor oligonucleotides were  
 ligated to the blunt ends in high molar excess. The  
 adaptor DNA was purified and size-selected for a 9.5 to  
 10.5 kb range using preparative agarose gel  
 electrophoresis. Vector DNA was prepared from a derivative  
 of pMD42 (g14732114|g14732114|g14732114), a copy-number  
 inducible derivative of plasmid RI. The vector was ligated  
 with adaptors complementary to the insert adaptors and  
 purified. The sheared, adaptor mouse DNA was annealed to  
 adaptor vector DNA, and transformed into  
 chemically-competent E. coli XL10-Gold (Stratagene) cells  
 and selected for ampicillin resistance."

ORIGIN  
 Query Match 54.4%; Score 9.8; DB 9; Length 27;  
 Best Local Similarity 84.6%; Pred. No. 3.3e+06;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 5 CCAGCGTGGCCCA 17  
 |||||  
 Db 25 CCACTTGGCCCA 13

RESULT 22  
 A1037937 28 bp mRNA linear EST 28-AUG-1998  
 LOCUS A1037937  
 DEFINITION OX33a11.x1 Soares total fetus NB2HP8.9w Homo sapiens cDNA clone  
 IMAGE:1660028 3' similar to SW:NOT5\_MBD5A P11728 EARLY NODULIN 75  
 ; mRNA sequence.  
 ACCESSION A1037937  
 VERSION A1037937.1 GI:3277131  
 KEYWORDS EST.  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;  
 Homidae; Homo.

REFERENCE  
 1 (bases 1 to 28)  
 NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.  
 National Cancer Institute, Cancer Genome Anatomy Project (CGAP),  
 Tumor Gene Index  
 Unpublished (1997)  
 JOURNAL  
 COMMENT Contact: Robert Strausberg, Ph.D.  
 Email: cgaps-r@mail.nih.gov  
 This clone is available royalty-free through LNL; contact the  
 IMAGE Consortium (info@image.llnl.gov) for further information.  
 Trace considered overall poor quality  
 Insert Length: 1003 Std Error: 0.00  
 Seg primer: -40m13 fwd. ET from Amersham  
 High quality sequence stop: 1.  
 Location/Qualifiers  
 1. 28  
 /organism="Homo sapiens"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:9606"  
 /clone="IMAGE:1660028"  
 /dev\_stage="8-9 weeks"  
 /lab\_host="DH10B"  
 /note="Vector: pRT3D-Pac (Pharmacia) with a modified  
 polylinker; Site 1: Not I; Site 2: Eco RI; 1st strand cDNA  
 was prepared from mRNA obtained from pooled 8-9 week  
 (total) fetus material with a Not I - oligo(dT) primer [5'  
 TGTTCACATCTGAAGTGGAGCGCGCTTAATTTTCTTTTCTTTT 3']  
 TGTTCACATCTGAAGTGGAGCGCGCGCTTAATTTTCTTTTCTTTT 3']  
 Double-stranded cDNA was ligated to Eco RI adaptors  
 (Pharmacia), digested with Not I and cloned into the Not I  
 and Eco RI sites of the modified pRT3 vector. Library  
 went through one round of normalization, and was  
 constructed by Bento Soares and M. Fatima Bonaldo."

#### FEATURES

##### source

1. 28  
 /organism="Homo sapiens"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:9606"  
 /clone="IMAGE:1660028"  
 /dev\_stage="8-9 weeks"  
 /lab\_host="DH10B"  
 /note="Vector: pRT3D-Pac (Pharmacia) with a modified  
 polylinker; Site 1: Not I; Site 2: Eco RI; 1st strand cDNA  
 was prepared from mRNA obtained from pooled 8-9 week  
 (total) fetus material with a Not I - oligo(dT) primer [5'  
 TGTTCACATCTGAAGTGGAGCGCGCTTAATTTTCTTTTCTTTT 3']  
 TGTTCACATCTGAAGTGGAGCGCGCGCTTAATTTTCTTTTCTTTT 3']  
 Double-stranded cDNA was ligated to Eco RI adaptors  
 (Pharmacia), digested with Not I and cloned into the Not I  
 and Eco RI sites of the modified pRT3 vector. Library  
 went through one round of normalization, and was  
 constructed by Bento Soares and M. Fatima Bonaldo."

#### ORIGIN

Query Match 54.4%; Score 9.8; DB 1; Length 28;  
 Best Local Similarity 84.6%; Pred. No. 3.3e+06;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 4 CCAGCGTGGCC 16  
 |||||  
 Db 2 CCACGAGCGCC 14

RESULT 23  
 A1287864 28 bp mRNA linear EST 24-NOV-1998  
 LOCUS A1287864  
 DEFINITION gw07d12.x1 NCI CGAP Kid8 Homo sapiens cDNA clone IMAGE:1980887 3'  
 similar to SW:CA44\_HUMAN P53420 COLLAGEN ALPHA 4 (IV) CHAIN  
 PRECURSOR; contains MER22.b3 TARI repetitive element ; mRNA  
 sequence.  
 ACCESSION A1287864  
 VERSION A1287864.1 GI:3927617

**KEYWORDS** EST.  
**SOURCE** Homo sapiens (human)  
**ORGANISM** Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae; Homo.  
**REFERENCE** 1 (bases 1 to 28)  
**AUTHORS** NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.  
**TITLE** National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index  
**JOURNAL** Unpublished (1997)  
**COMMENT** Contact: Robert Strausberg, Ph.D.  
 Email: [cgaps-remail.nih.gov](mailto:cgaps-remail.nih.gov)  
 Tissue Procurement: Christopher Moskalko, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.  
 cDNA Library Preparation: Life Technologies, Inc.  
 cDNA Library Arrayed by: Greg Lennon, Ph.D.  
 DNA Sequencing by: Washington University Genome Sequencing Center  
 Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LMNL at: [www.bio.lim.gov/bdip/image/image.html](http://www.bio.lim.gov/bdip/image/image.html)

**FEATURES**  
 source  
 1..28  
 /organism="Homo sapiens"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:9606"  
 /clone="IMAGE:1980887"  
 /tissue\_type="renal cell tumor"  
 /lab\_host="DH10B"  
 /clone\_lib="NCI CGAP Kid8"  
 /note="Organ: Kidney; Vector: PCNV-SPORT6; Site\_1: Sall; Site\_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.2 kb. Life Technologies catalog #: 11524-014"

**ORIGIN**  
 Query Match 54.4%; Score 9.8; DB 1; Length 28;  
 Best Local Similarity 84.6%; Pred. No. 3.3e+06;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

**QY** 4 CCCAGCGTGGCC 16  
 |||||  
 |||||

**Db** 2 CCCACCGCGGCC 14

**RESULT 24**  
 A2495536/c 29 bp DNA linear GSS 05-OCT-2000  
 LOCUS IM0331N05 Mouse 10kb plasmid UGCG1M library Mus musculus genomic  
 DEFINITION clone UGCG1M0331N05 F, genomic survey sequence.  
 ACCESSION A2495536  
 VERSION A2495536.1 GI:10671033  
 KEYWORDS GSS.  
 SOURCE Mus musculus (house mouse)  
 ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muridae; Muridae; Mus.  
**REFERENCE** 1 (bases 1 to 29)  
**AUTHORS** Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Irlam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tinney, A., von Niederhausen, A., and Wright, D., Weis, R.  
**TITLE** Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts  
**JOURNAL** Unpublished (2000)  
**COMMENT** Contact: Robert B. Weiss  
 University of Utah Genome Center

Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLIC, UT 84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: [ddunn@genetics.utah.edu](mailto:ddunn@genetics.utah.edu)  
 Insert Length: 10000 Std Error: 0.00  
 Plate: 031 row: N column: 05  
 Seq primer: CGTTGTAAACGACGCGCCAGT  
 Class: plasmid ends  
 High quality sequence stop: 29.

**FEATURES**  
 source  
 1..29  
 /organism="Mus musculus"  
 /mol\_type="genomic DNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="UGCG1M0331N05"  
 /sex="Male"  
 /lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
 /clone\_lib="Mouse 10kb plasmid UGCG1M library"  
 /note="Vector: PMD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource  
 (<http://www.jax.org/resources/documents/dnares/>). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of PMD42 ([gi|4732114|gb|AF129072.1](http://gi|4732114|gb|AF129072.1)), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

**ORIGIN**  
 Query Match 54.4%; Score 9.8; DB 9; Length 29;  
 Best Local Similarity 84.6%; Pred. No. 3.3e+06;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

**QY** 1 TCTCCAGCGTGC 13  
 |||||  
 |||||

**Db** 23 TCTCTTGGCGTC 11

**RESULT 25**  
 BE297610/c 30 bp mRNA linear EST 20-JUL-2000  
 LOCUS 601178187P1 NIH\_MGC\_17 Homo sapiens cDNA clone IMAGE:353395 5',  
 DEFINITION mRNA sequence.  
 ACCESSION BE297610  
 VERSION BE297610.1 GI:9181097  
 KEYWORDS EST.  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae; Homo.  
**REFERENCE** 1 (bases 1 to 30)  
**AUTHORS** NIH-MGC <http://mgc.nci.nih.gov/>.  
**TITLE** National Institutes of Health, Mammalian Gene Collection (MGC)  
**JOURNAL** Unpublished (1999)  
**COMMENT** Contact: Robert Strausberg, Ph.D.  
 Email: [cgaps-remail.nih.gov](mailto:cgaps-remail.nih.gov)  
 Tissue Procurement: ATCC  
 cDNA Library Preparation: Ling Hong/Rubin Laboratory  
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LMNL)  
 DNA Sequencing by: Incyte Genomics, Inc.



Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at: [image.lnl.gov/plate: L1CM210](http://image.lnl.gov/plate: L1CM210) row: n column: 21  
High quality sequence stop: 28.  
Location/Qualifiers

## FEATURES

## source

1. .30  
/organism="Homo sapiens"  
/mol\_type="mRNA"  
/db\_xref="taxon:9606"  
/clone="IMAGE:3533396"  
/tissue\_type="rhabdomyosarcoma"  
/lab\_host="DH10B (phage-resistant)"  
/clone\_1lb="N1H MGC 17"  
/note="Organ: muscle; Vector: pORF7; Site 1: EcoRI; Site 2: XhoI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."

## ORIGIN

Query Match 54.4%; Score 9.8; DB 2; Length 30;  
Best Local Similarity 84.6%; Pred. No. 3.3e+06;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

## QY

5 CCAGCGTGGCCCA 17  
|||||  
23 CCAGCGCGCGCA 11

## Db

## RESULT 26

AJ600497 19 bp DNA linear GSS 15-JAN-2004  
LOCUS Arabidopsis thaliana T-DNA flanking sequence, right border, clone 507E11, genomic survey sequence.  
ACCESSION AJ600497.1 GI:37950125  
VERSION GSS; Right border; T-DNA flanking sequence.  
KEYWORDS Arabidopsis thaliana (thale cress)  
SOURCE Arabidopsis thaliana  
ORGANISM Arabidopsis thaliana

## REFERENCE

1 Brunaud, V., Balzergue, S., Dubreucq, B., Aubourg, S., Samson, F., Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G., Lepoint, L., Caboche, M. and Lecharny, A.  
T-DNA integration into the Arabidopsis genome depends on sequences of pre-insertion sites  
EMBO Rep. 3 (12), 1152-1157 (2002)

## AUTHORS

2 (bases 1 to 19)  
Balzergue, S.  
Direct Submission  
Submitted (23-OCT-2003) Balzergue S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE  
PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment(s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at <http://dbsag.versailles.inra.fr/publiclines/>. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (<http://www.genoplante.com> and <http://genoplante-info.infobiogen.fr>).  
Location/Qualifiers

## JOURNAL

## PUBMED

## REFERENCE

## AUTHORS

## TITLE

## COMMENT

1. .19  
/organism="Arabidopsis thaliana"  
/mol\_type="genomic DNA"

## FEATURES

source

/db\_xref="taxon:3702"  
/clone="507E11"  
/clone\_1lb="Arabidopsis thaliana T-DNA insertion lines"  
/ecotype="Wassilewskija"  
1. .19  
/note="T-DNA flanking sequence right border"

## ORIGIN

Query Match 53.3%; Score 9.6; DB 10; Length 19;  
Best Local Similarity 75.0%; Pred. No. 4e+06;  
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

## QY

2 CTCGCGTGGCCCA 17  
|||||  
3 CTCGCGCGCGCA 18

## Db

## RESULT 27

CFJ13697/c 21 bp mRNA linear EST 15-AUG-2003  
LOCUS HD-01-017.b1 OSHDAC1-overexpressing transgenic rice plasmid cDNA library (HD) Oryza sativa (japonica cultivar-group) cDNA clone HD-01-017, mRNA sequence.  
ACCESSION CFJ13697  
VERSION CFJ13697.1 GI:33685458  
KEYWORDS EST.  
SOURCE Oryza sativa (japonica cultivar-group)  
ORGANISM Oryza sativa (japonica cultivar-group)  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzaceae; Oryza.

## REFERENCE

1 (bases 1 to 21)  
Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C., Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.  
Large-scale Sequencing Analysis of Rice ESTs  
Unpublished (2003)  
Contact: Nahm B.H.  
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, Myongji University  
Yongin, Gyeonggi, Korea  
Tel: 82 31 330 6193  
Fax: 82 31 321 6355  
Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.  
Location/Qualifiers

## AUTHORS

## TITLE

## JOURNAL

## COMMENT

## FEATURES

## source

1. .21  
/organism="Oryza sativa (japonica cultivar-group)"  
/mol\_type="mRNA"  
/cultivar="Nackdong"  
/db\_xref="taxon:39947"  
/clone="HD-01-017"  
/tissue\_type="callus"  
/dev\_stage="proliferated callus on 2N6 media for 2 weeks"  
/lab\_host="E.coli DH10B"  
/clone\_1lb="OSHDA1-overexpressing transgenic rice plasmid cDNA library (HD)"  
/note="Vector: pCR4-TOPO; Site 1: EcoRI; Callus was treated with ABA(20um) for 1hr. Oligo-capped mRNA was reverse transcribed and then used for PCR. mRNA was derived from rice Histone Deacetylase overexpression line."

## ORIGIN

Query Match 53.3%; Score 9.6; DB 6; Length 21;  
Best Local Similarity 75.0%; Pred. No. 4.1e+06;  
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

## QY

3 TCCGCGTGGCCCA 18  
|||||  
16 TCCGCGTGGCCCA 1

## Db

## RESULT 28

AI1339084 22 bp mRNA linear EST 13-FEB-1999  
LOCUS AI1339084  
DEFINITION q29h01.x1 Soares\_NbHMPu.S1 Homo sapiens cDNA clone IMAGE:1933969  
3' similar to TR:040336 Q40336 CELL WALL PROTEIN. ; mRNA sequence.  
ACCESSION AI1339084  
VERSION AI1339084.1 GI:4076011  
KEYWORDS EST.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;  
Homnidae; Homo.  
1 (bases 1 to 22)  
NCI-CCGAP http://www.ncbi.nlm.nih.gov/ncicgap.  
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),  
Tumor Gene Index  
Unpublished (1997)  
JOURNAL Contact: Robert Strausberg, Ph.D.  
COMMENT Email: cgaaps-r@mail.nih.gov  
This clone is available royalty-free through LNL; contact the  
IMAGE Consortium (info@image.llnl.gov) for further information.  
Insert Length: 1073 Std Error: 0.00  
Seq primer: -40UP from Gibco  
High quality sequence stop: 1.  
Location/Qualifiers  
1..22  
/organism="Homo sapiens"  
/mol\_type="mRNA"  
/db\_xref="taxon:9606"  
/clone="IMAGE:1933969"  
/tissue\_type="Pooled human melanocyte, fetal heart, and  
pregnant uterus"  
/lab\_host="DH10B"  
/clone\_1lb="Soares\_NbHMPu.S1"  
/note="Organ: mixed (see below); Vector: pT73D-Pac  
(Pharmacia) with a modified polylinker; Site 1: Not I;  
Site 2: Eco RI; Equal amounts of plasmid DNA from three  
normalized libraries (melanocyte 2NDHM, pregnant uterus  
NBHPU, and fetal heart NBH19U) were mixed, and as circles  
were made in vitro. Following HAP purification, this DNA  
was used as tracer in a subtractive hybridization  
reaction. The driver was PCR-amplified cDNAs from pools of  
5,000 clones made from the same 3 libraries. The pools  
consisted of I.M.A.G.E. clones 260232-265223,  
340488-345479, and 484488-489479."

ORIGIN  
Query Match 53.3%; Score 9.6; DB 1; Length 22;  
Best Local Similarity 75.0%; Pred. No. 4.1e+06;  
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTCCCAGCGTGGCCCA 17  
|||||  
7 CTCCTCCGCGCCGCGCA 22  
|||||

RESULT 29  
AI664440/c 22 bp mRNA linear EST 10-MAY-1999  
LOCUS AI664440/c  
DEFINITION u662c03.r1 Soares mammary gland NMLMG Mus musculus cDNA clone  
IMAGE:1495684 5' similar to TR:088823 O88823 RJTB PROTEIN. [1] ;  
mRNA sequence.  
ACCESSION AI664440  
VERSION AI664440.1 GI:4768023  
KEYWORDS EST.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathu; Muridea; Muridae; Murinae; Mus.  
1 (bases 1 to 22)  
NCI-CCGAP http://www.ncbi.nlm.nih.gov/ncicgap.  
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),  
Tumor Gene Index

JOURNAL Unpublished (1997)  
COMMENT Contact: Robert Strausberg, Ph.D.  
Email: cgaaps-r@mail.nih.gov  
This clone is available royalty-free through LNL; contact the  
IMAGE Consortium (info@image.llnl.gov) for further information.  
MGI:933288  
Trace considered overall poor quality  
Possible reversed clone; similarity on wrong strand  
Seq primer: -28m3 rev2 ET from Amerham  
High quality sequence stop: 1.  
Location/Qualifiers  
1..22  
/organism="Mus musculus"  
/mol\_type="mRNA"  
/db\_xref="taxon:10090"  
/clone="IMAGE:1495684"  
/sex="female (lactating)"  
/tissue\_type="mammary gland"  
/lab\_host="DH10B"  
/clone\_1lb="Soares mammary gland NMLMG"  
/note="Vector: pT73D-Pac (Pharmacia) with a modified  
polylinker; 1st strand cDNA was prepared from mammary  
gland tissue from a lactating female, and was then primed  
with a Not I - oligo(dT) primer. Double-stranded cDNA was  
ligated to Eco RI adaptors (Pharmacia), digested with Not  
I and cloned into the Not I and Eco RI sites of the  
modified pT73 vector. Library is normalized. Library  
was constructed by Bento Soares and M. Fatima Bonaldo."

ORIGIN  
Query Match 53.3%; Score 9.6; DB 1; Length 22;  
Best Local Similarity 75.0%; Pred. No. 4.1e+06;  
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTCCCAGCGTGGCCCA 17  
|||||  
18 CTCCTCCGCGCCGCGCA 3  
|||||

RESULT 30  
A2779701/c 27 bp DNA linear GSS 16-FEB-2001  
LOCUS A2779701/c  
DEFINITION 2M0016M22F Mouse 10kb plasmid UGCG1M library Mus musculus genomic  
clone UGCGCM0016M22 F, genomic survey sequence.  
ACCESSION A2779701  
VERSION A2779701.1 GI:12910622  
KEYWORDS GSS.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathu; Muridea; Muridae; Murinae; Mus.  
1 (bases 1 to 27)  
Dunn,D., Aoyagi,A., Barber,M., Beacom,T., Duval,B., Hamil,C.,  
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,  
Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von  
Niederhausen,A. and Wright,D.,Weiss,R.  
Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
Unpublished (2000)  
JOURNAL Contact: Robert B. Weiss  
COMMENT University of Utah Genome Center  
University of Utah  
Km. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT  
84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunngene@genome.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0016 row: M column: 22  
Seq primer: CGTGTGAACGACGCGCCACT  
Class: plasmid ends

High quality sequence stop: 27.  
Location/Qualifiers  
1. .27  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UTGCM0016M22"  
/sex="Male"  
/lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
/clone\_lib="Mouse 10kb plasmid UGCM library"  
/note="Vector: PWD42uv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource  
(http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (GI4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

ORIGIN

Query Match  
Best Local Similarity 53.3%; Score 9.6; DB 9; Length 27;  
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Db  
2 CTCCGAGCGTGGCCCA 17  
| ||||| |||||  
27 CCCCACCCCTGCCCA 12

RESULT 31  
AA721232 28 bp mRNA linear EST 31-DEC-1997  
n272b06.s1 NCI CGAP GCB1 Homo sapiens cDNA clone IMAGE:1100979 3'  
similar to TR:Q12865 Q12865 NF-ATC.; mRNA sequence.

ACCESSION  
AA721232  
AA721232.1 GI:2737367

VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
Homo sapiens (human)  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;  
Homnidae; Homo.  
1 (bases 1 to 28)  
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.  
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),  
Tumor Gene Index  
Unpublished (1997)  
Contact: Robert Strausberg, Ph.D.  
Email: cgapbs-r@mail.nih.gov  
Tissue Procurement: Louis M. Staudt, M.D., Ph.D., David Allman,  
Ph.D., Gerald Marti, M.D. Bento Soares, Ph.D., M. Fatima  
Bonaldo, Ph.D.  
cDNA Library Arrayed by: Greg Lennon, Ph.D.  
DNA Sequencing by: Washington University Genome Sequencing Center  
Clone distribution: NCI-CGAP clone distribution information can be  
found through the I.M.A.G.E. Consortium/LLNL at:  
www.bio.llnl.gov/bbrp/image/image.html

JOURNAL  
COMMENT

REFERENCE  
AUTHORS  
TITLE

FEATURES  
source

Trace considered overall poor quality  
Seq primer: -40m3 fwd. ET from Amerham

High quality sequence stop: 1.  
Location/Qualifiers  
1. .28  
/organism="Homo sapiens"  
/mol\_type="mRNA"  
/db\_xref="taxon:9606"  
/clone="IMAGE:1300979"  
/cissue\_type="germinal center B cell"  
/lab\_host="DH10B"  
/clone\_lib="NCI CGAP GCB1"  
/note="Vector: p7T3D-Pac (Pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; 1st strand cDNA was prepared from human consiliar cells enriched for germinal center B cells by flow sorting (CD20+, IgD-), provided by Dr. Louis M. Staudt (NCI), Dr. David Allman (NCI) and Dr. Gerald Marti (CBER). cDNA synthesis was primed with a Not I - oligo(dT) primer  
[5'-TGTTACATCTGAGTGGAGCGCCGCTCATTTTCTTTT-3'  
]. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified p7T3 vector. Library went through one round of normalization, and was constructed by Bento Soares and M. Fatima Bonaldo."

ORIGIN

Query Match  
Best Local Similarity 53.3%; Score 9.6; DB 1; Length 28;  
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Db  
2 CTCCGAGCGTGGCCCA 17  
| ||||| |||||  
13 CTCCGAGCGCTCAGCA 28

RESULT 32  
AZ837343 28 bp DNA linear GSS 20-FEB-2001  
2M0132M04R Mouse 10kb plasmid UGCM library Mus musculus genomic  
clone UGCM0132M04 R, genomic survey sequence.

ACCESSION  
AZ837343  
AZ837343.1 GI:13007251

VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
Mus musculus (house mouse)  
Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathi; Muridae; Murinae; Mus.  
1 (bases 1 to 28)  
Dunn.D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,  
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,  
Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von  
Niederhausern,A. and Wright,D.,Weiss,R.  
Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
Unpublished (2000)  
Contact: Robert B. Weiss  
University of Utah Genome Center  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLIC, UT  
84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: dunn@genetics.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0132 row: M Column: 04  
Seq primer: CACACGAGAAACAGCTATGACC  
Class: plasmid ends  
High quality sequence stop: 28.  
Location/Qualifiers  
1. .28  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"

FEATURES  
source

/db\_xref="taxon:10090"  
 /clone="UUGC2M0132M04"  
 /sex="Male"  
 /lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
 /clone\_lib="Mouse 10kb plasmid UUGC1M library"  
 /note="Vector: PMD42nv, Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (<http://www.jax.org/resources/documents/shares/>). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of PMD42 (GI:4732114|gb|AF19072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

## ORIGIN

Query Match 53.3%; Score 9.6; DB 9; Length 28;  
 Best Local Similarity 75.0%; Pred. No. 4.1e+06;  
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3 TCCGAGCGTGGCCAT 18  
 |||||  
 Db 10 TGCATCTTGACACAT 25

RESULT 33 BM399313 29 bp mRNA linear EST 17-JAN-2002  
 LOCUS BM399313/c 5009-0-56-E02.t.2 Chilcoat/Turkewitz cDNA (large fraction)  
 DEFINITION Tetrahymena thermophila cDNA, mRNA sequence.

ACCESSION BM399313  
 VERSION BM399313.1 GI:18199366  
 KEYWORDS EST.

SOURCE Tetrahymena thermophila  
 ORGANISM Tetrahymena thermophila  
 Eukaryota; Alveolata; Ciliophora; Oligohymenophorea; Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.

REFERENCE 1 (bases 1 to 29)  
 AUTHORs Turkewitz,A.P., Karrer,K.M., Jahn,C., Orias,E., Kirk,K.E., Frankel,J. and Klobutcher,L.  
 TITLE EST from Tetrahymena thermophila, strain CU428.1, growing cells  
 JOURNAL Unpublished (2002)

COMMENT Contact: Turkewitz AP  
 Molecular Genetics and Cell Biology  
 University of Chicago  
 920 E. 58th Street, Chicago, IL 60637, USA  
 Tel: 773 702 4374  
 Fax: 773 702 3172  
 Email: apturkew@midway.uchicago.edu  
 Seq primer: T3.  
 Location/Qualifiers

## FEATURES

## source

1..29  
 /organism="Tetrahymena thermophila"  
 /mol\_type="mRNA"  
 /strain="CU428.1"  
 /db\_xref="taxon:5911"  
 /clone\_lib="Chilcoat/Turkewitz cDNA (large fraction)"  
 /note="Vector: Bluescript2 SK+; Details on library preparation can be found in Chilcoat and Turkewitz (2001) Proc. Natl. Acad. Sci USA, 98: 8709-8713."

## ORIGIN

Query Match 53.3%; Score 9.6; DB 3; Length 29;

Best Local Similarity 75.0%; Pred. No. 4.1e+06;  
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTCGACGTCGCCCA 17  
 |||||  
 Db 20 CCCCCCGGTGATCA 5

## RESULT 34

LOCUS AU590743 22 bp DNA linear GSS 15-JAN-2004  
 DEFINITION Arabidopsis thaliana T-DNA flanking sequence, left border, clone 574B12, genomic survey sequence.

ACCESSION AU590743  
 VERSION AU590743.1 GI:37940367  
 KEYWORDS GSS; left border; T-DNA flanking sequence.  
 SOURCE Arabidopsis thaliana (thale cress)  
 ORGANISM Arabidopsis thaliana  
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

## REFERENCE

AUTHORS Brunaud,V., Balzerque,S., Dubreucq,B., Aubourg,S., Samson,F., Chauvin,S., Bechold,N., Cruaud,C., Derose,R., Pelletier,G., Lepointec,L., Caboche,M. and Lecharny,A.  
 TITLE T-DNA integration into the Arabidopsis genome depends on sequences of pre-insertion sites  
 JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)

PUBMED 12446565  
 REFERENCE 2 (bases 1 to 22)

AUTHORS Balzerque,S.  
 TITLE Direct Submission  
 JOURNAL Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE

COMMENT PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment(s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at <http://dbsgap.versailles.inra.fr/publiclines/>. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (<http://www.genoplante.com> and <http://genoplante-info.infobiogen.fr>).  
 Location/Qualifiers

## FEATURES

## source

1..22  
 /organism="Arabidopsis thaliana"  
 /mol\_type="genomic DNA"  
 /db\_xref="taxon:3702"  
 /clone="574B12"  
 /clone\_lib="Arabidopsis thaliana T-DNA insertion lines"  
 /ecotype="Wassilewskija"  
 1..22  
 /note="T-DNA flanking sequence left border"

## ORIGIN

Query Match 52.2%; Score 9.4; DB 10; Length 22;  
 Best Local Similarity 90.9%; Pred. No. 5.1e+06;  
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 AGCGTGCGCCA 17  
 |||||  
 Db 3 AGCGTGCGCCA 13

## RESULT 35

LOCUS AZ808123 23 bp DNA linear GSS 20-FEB-2001  
 DEFINITION Arabidopsis thaliana T-DNA flanking sequence, left border, clone 2M0071C01R Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC2M0071C01 R, genomic survey sequence.

## ACCESSION

AZ808123

```

VERSION      AZ808123.1  GI:12973153
KEYWORDS     GSS.
SOURCE       Mus musculus (house mouse)
ORGANISM     Mus musculus
REFERENCE    1 (bases 1 to 23)
AUTHORS      Dunn,D., Aoyagi,A., Barber,M., Beacom,T., Duval,B., Hamil,C.,
            Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,
            Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von
            Niederhausern,A. and Wright,D., Weiss,R.
TITLE        Mouse whole genome scaffolding with paired end reads from 10kb
            plasmid inserts
JOURNAL      Unpublished (2000)
COMMENT      Contact: Robert B. Weiss
            University of Utah Genome Center
            Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
            84112, USA
            Tel: 801 585 5606
            Fax: 801 585 7177
            Email: ddunn@genetics.utah.edu
            Insert Length: 10000 Std Error: 0.00
            Plate: 0071 row: C column: 01
            Seq primer: CACACAGAAACAGCATATGAC
            Class: plasmid ends
            High quality sequence stop: 23.
FEATURES
source
1. 23
    /organism="Mus musculus"
    /mol_type="genomic DNA"
    /strain="C57BL/6J"
    /db_xref="taxon:10090"
    /clone="U08C2M0071C01"
    /sex="Male"
    /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
    /clone_1ib="Mouse 10kb plasmid UUGC1M library"
    /note="Vector: PMD42nv; Purified genomic DNA from M.
    musculus C57BL/6J (male); was obtained from the Jackson
    Laboratory Mouse DNA Resource
    (http://www.jax.org/resources/documents/dnares/). The DNA
    was hydrodynamically sheared by repeated passage through a
    0.005 inch orifice at constant velocity. The sheared DNA
    was blunt end-repaired with T4 DNA polymerase and T4
    polynucleotide kinase. Adaptor oligonucleotides were
    ligated to the blunt ends in high molar excess. The
    adaptor DNA was purified and size-selected for a 9.5 to
    10.5 kb range using preparative agarose gel
    electrophoresis. Vector DNA was prepared from a derivative
    of pMD42 (gi|4732114|gb|AF129072.1), a copy-number
    inducible derivative of plasmid R1. The vector was ligated
    with adaptors complementary to the insert adaptors and
    purified. The sheared, adaptor mouse DNA was annealed to
    adaptor vector DNA, and transformed into
    chemically-competent E. coli XL10-Gold (Stratagene) cells
    and selected for ampicillin resistance."
ORIGIN
Query Match      52.2%; Score 9.4; DB 9; Length 23;
Best Local Similarity 90.9%; Pred. No. 5.1e+06;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 7 AGCGTGGCCCA 17
    |||||
    |||||
Db 16 AGGTGGCCCA 6
RESULT 36
AZ650143/c      24 bp DNA linear GSS 14-DEC-2000
LOCUS          1M052011F Mouse 10kb plasmid UUGC1M library Mus musculus genomic
DEFINITION     clone UUGC1M052011 F, genomic survey sequence.

```

```

ACCESSION    AZ650143
VERSION      AZ650143.1  GI:11784331
KEYWORDS     GSS.
SOURCE       Mus musculus (house mouse)
ORGANISM     Mus musculus
REFERENCE    1 (bases 1 to 24)
AUTHORS      Dunn,D., Aoyagi,A., Barber,M., Beacom,T., Duval,B., Hamil,C.,
            Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,
            Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von
            Niederhausern,A. and Wright,D., Weiss,R.
TITLE        Mouse whole genome scaffolding with paired end reads from 10kb
            plasmid inserts
JOURNAL      Unpublished (2000)
COMMENT      Contact: Robert B. Weiss
            University of Utah Genome Center
            Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
            84112, USA
            Tel: 801 585 5606
            Fax: 801 585 7177
            Email: ddunn@genetics.utah.edu
            Insert Length: 10000 Std Error: 0.00
            Plate: 0520 row: I column: 11
            Seq primer: CATTGTAAACGACGCCAGT
            Class: plasmid ends
            High quality sequence stop: 24.
FEATURES
source
1. 24
    /organism="Mus musculus"
    /mol_type="genomic DNA"
    /strain="C57BL/6J"
    /db_xref="taxon:10090"
    /clone="UUGC1M052011F"
    /sex="Male"
    /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
    /clone_1ib="Mouse 10kb plasmid UUGC1M library"
    /note="Vector: PMD42nv; Purified genomic DNA from M.
    musculus C57BL/6J (male) was obtained from the Jackson
    Laboratory Mouse DNA Resource
    (http://www.jax.org/resources/documents/dnares/). The DNA
    was hydrodynamically sheared by repeated passage through a
    0.005 inch orifice at constant velocity. The sheared DNA
    was blunt end-repaired with T4 DNA polymerase and T4
    polynucleotide kinase. Adaptor oligonucleotides were
    ligated to the blunt ends in high molar excess. The
    adaptor DNA was purified and size-selected for a 9.5 to
    10.5 kb range using preparative agarose gel
    electrophoresis. Vector DNA was prepared from a derivative
    of pMD42 (gi|4732114|gb|AF129072.1), a copy-number
    inducible derivative of plasmid R1. The vector was ligated
    with adaptors complementary to the insert adaptors and
    purified. The sheared, adaptor mouse DNA was annealed to
    adaptor vector DNA, and transformed into
    chemically-competent E. coli XL10-Gold (Stratagene) cells
    and selected for ampicillin resistance."
ORIGIN
Query Match      52.2%; Score 9.4; DB 9; Length 24;
Best Local Similarity 90.9%; Pred. No. 5.1e+06;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 CAGCGTGGCCC 16
    |||||
    |||||
Db 19 CAGCGTGGACC 9
RESULT 37
A1006239/c      28 bp mRNA linear EST 12-JUN-1998
LOCUS          uas8ell.r1 Soares_mammary_gland_NBMWG Mus musculus cDNA clone
DEFINITION     uas8ell.r1 Soares_mammary_gland_NBMWG Mus musculus cDNA clone

```

IMAGE:1364588 5' similar to TR:035120 O35120 MGP1IP.;, mRNA sequence.  
 ACCESSION AI006239 GI:3215848  
 VERSION AI006239.1 GI:3215848  
 KEYWORDS EST.  
 SOURCE Mus musculus (house mouse)  
 ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.  
 1 (bases 1 to 28)  
 REFERENCE Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and Waterston, R.  
 TITLE The WashU-HMT Mouse EST Project  
 JOURNAL Unpublished (1996)  
 COMMENT Contact: Marra M/Mouse EST Project  
 Washington University School of Medicine  
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108  
 Tel: 314 286 1800  
 Fax: 314 286 1810  
 Email: mouseest@watson.wustl.edu  
 This clone is available royalty-free through LBNL; contact the IMAGE Consortium (info@image.lbnl.gov) for further information.  
 MGI:897808  
 Trace considered overall poor quality  
 Possible reversed clone: similarity on wrong strand  
 Seq primer: -28ml3 rev2 ET from Amersham  
 High quality sequence stop: 1.  
 FEATURES  
 source  
 1..28  
 Location/Qualifiers  
 /organism="Mus musculus"  
 /mol\_type="mRNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="IMAGE:1364588"  
 /sex="male"  
 /tissue\_type="mammary gland"  
 /dev\_stage="4 weeks"  
 /lab\_host="DH10B"  
 /clone\_lib="Soares mammary gland NDbwG"  
 /note="Organ: mammary gland; Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site:1: Not I; Site:2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5', TGTACCACTGAGTGAAGGAGCGCGCGCAATGTTTTTTTTTTTTTTTTTTT T 3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT73 vector. RNA provided by Dr. Minoru Ko, Wayne State Univ. Library constructed and normalized by Bento Soares and M.Fatima Bonaldo."

Query Match 52.2%; Score 9.4; DB 1; Length 28;  
 Best Local Similarity 90.9%; Pred. No. 5.2e+06;  
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2 CTCGCCGCGT 12  
 DB 17 CTCGCCGCGT 7

RESULT 38  
 AZ309550 29 bp DNA linear GSS 29-SEP-2000  
 LOCUS M0016A11 Mouse 10kb plasmid UGCGIM library Mus musculus genomic  
 DEFINITION clone UGCGIM0016A11 F, genomic survey sequence.  
 ACCESSION AZ309550  
 VERSION AZ309550.1 GI:10350833

KEYWORDS GSS.  
 SOURCE Mus musculus (house mouse)  
 ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.  
 1 (bases 1 to 29)  
 REFERENCE Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Weiss, R.  
 TITLE Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts  
 JOURNAL Unpublished (2000)  
 COMMENT Contact: Robert B. Weiss  
 University of Utah Genome Center  
 University of Utah  
 Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLG, UT 84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: ddunn@genetics.utah.edu  
 Insert Length: 10000 Std. Error: 0.00  
 Plate: 0016 Row: A Column: 11  
 Seq primer: CGTGTAAACGACGCGCACT  
 Class: plasmid ends  
 High quality sequence stop: 29.  
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 /organism="Mus musculus"  
 /mol\_type="genomic DNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="UGCGIM0016A11"  
 /sex="Male"  
 /lab\_host="E. Coli strain X110-Gold, T1-resistant, F-"  
 /clone\_lib="Mouse 10kb plasmid UGCGIM library"  
 /note="Vector: PMD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource  
 (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (gi|473214|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli X110-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match 52.2%; Score 9.4; DB 9; Length 29;  
 Best Local Similarity 90.9%; Pred. No. 5.2e+06;  
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 TCTCCGCGCT 11  
 DB 1 TCTCCGCGCT 11

RESULT 39  
 BG929060 17 bp mRNA linear EST 06-NOV-2001  
 LOCUS HNC11-1-G8 R HNC (Human Normal Cartilage) Homo sapiens cDNA, mRNA  
 DEFINITION HNC11-1-G8 R HNC (Human Normal Cartilage) Homo sapiens cDNA, mRNA  
 ACCESSION BG929060  
 VERSION BG929060

```

VERSION      BG929060.1 GI:14323563
KEYWORDS     EST.
SOURCE       Homo sapiens (human)
ORGANISM     Homo sapiens
REFERENCE    1 (bases 1 to 17)
AUTHORS      Kumar,S., Connor,J.R., Dodds,R.A., Halsey,W., Van Horn,M., Mao,J.,
              Sathe,G., Mui,P., Agarwal,P., Badger,A.M., Lee,J.C., Gowen,M. and
              Lark,M.W.
TITLE        Identification and initial characterization of 5000 expressed
              sequenced tags (ESTs) each from adult human normal and
              osteoarthritic cartilage cDNA libraries
              Osteoarthr. Cartil. 9 (7), 641-653 (2001).
JOURNAL      11597177
PUBMED
COMMENT      Contact: Sanjay Kumar
              UM2109
              GlaxoSmithKline
              709 Swedeland Road, P.O. Box 1539, King of Prussia, PA 19406, USA
              Tel: 610-270-7245
              Fax: 610-270-5598
              Email: sanjay.kumar-1@sk.com
              Seq primer: T7.
FEATURES
  source
    1..17
    /organism="Homo sapiens"
    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /issue_type="cartilage"
    /lab_host="E.coli DH10 B"
    /clone_lib="HNC (Human Normal Cartilage)"
    /note="Vector: pSPORT I; Site_1: SalI; Site_2: NotI;
    Directional"

ORIGIN
Query Match      51.1%; Score 9.2; DB 2; Length 17;
Best Local Similarity 78.6%; Pred. No. 6.3e+06;
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY
4 CCCAGCGTGGCCA 17
|||||
1 CCCATCATGCGCA 14

RESULT 40
AJ589517
LOCUS        AJ589517 17 bp DNA linear GSS 15-JAN-2004
DEFINITION  Arabidopsis thaliana T-DNA flanking sequence, right border, clone
              552601, genomic survey sequence.
ACCESSION   AJ589517
VERSION     AJ589517.1 GI:37939141
KEYWORDS    GSS; right border; T-DNA flanking sequence.
SOURCE      Arabidopsis thaliana (thale cress)
ORGANISM    Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsids.
REFERENCE   1
AUTHORS     Brunaud,V., Balzergue,S., Dubreucq,B., Aubourg,S., Sanson,F.,
              Chauvin,S., Bechtold,N., Cruaud,C., Derose,R., Pelletier,G.,
              Lepoint,L., Caboche,M. and Lecharny,A.
TITLE        T-DNA integration into the Arabidopsis genome depends on sequences
              of pre-insertion sites
JOURNAL      EMBO Rep. 3 (12), 1152-1157 (2002)
PUBMED
COMMENT      2 (bases 1 to 17)
              Balzergue,S.
              Direct Submission
              Submitted (23-OCT-2003) Balzergue S., UMRGV, INRA/CNRS, 2 rue
              Gascon Creteilux, 91057 Evry cedex, FRANCE
              PCR was performed on DNA from transformants of Arabidopsis thaliana
              plants from INRA (Versailles). The DNA fragment(s) resulting from

```

the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at <http://dbgap.versailles.inra.fr/publiclines/>. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (<http://www.genoplante.com> and <http://genoplante-info.infobiogen.fr>).

```

FEATURES
  source
    1..17
    /organism="Arabidopsis thaliana"
    /mol_type="genomic DNA"
    /db_xref="taxon:3702"
    /clone="552601"
    /clone_lib="Arabidopsis thaliana T-DNA insertion lines"
    /ecotype="Massilewskija"
    1..17
    /note="T-DNA flanking sequence
    right border"

misc_feature
  misc_feature
    1..17
    /note="T-DNA flanking sequence
    right border"

ORIGIN
Query Match      51.1%; Score 9.2; DB 10; Length 17;
Best Local Similarity 68.8%; Pred. No. 6.3e+06;
Matches 11; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY
2 CTCGCCGCTGGCCA 17
|||||
2 CTCGCNCGCGGCCA 17

RESULT 41
AZ338061
LOCUS        AZ338061 19 bp DNA linear GSS 29-SEP-2000
DEFINITION  IM0069B05F Mouse 10kb plasmid UUGCM library Mus musculus genomic
              clone UUGC1M0069B05 F, genomic survey sequence.
ACCESSION   AZ338061
VERSION     AZ338061.1 GI:10410962
KEYWORDS    GSS.
SOURCE      Mus musculus (house mouse)
ORGANISM    Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Murioidea; Muridae; Murinae; Mus.
REFERENCE   1 (bases 1 to 19)
AUTHORS     Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamill,C.,
              Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,
              Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von
              Niederhausern,A. and Wright,D. Weis,R.
TITLE        Mouse whole genome scaffolding with paired end reads from 10kb
              plasmid inserts
              Unpublished (2000)
JOURNAL
COMMENT      Contact: Robert B. Weis
              University of Utah Genome Center
              University of Utah
              Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
              84112, USA
              Tel: 801 585 5606
              Fax: 801 585 7177
              Email: ddunn@genetics.utah.edu
              Insert length: 10000 Std Error: 0.00
              Plate: 0069 row: B column: 05
              Seq primer: CGTGTAAACGACGCGCAGT
              Class: plasmid ends
              High quality sequence stop: 19.
FEATURES
  source
    1..19
    /organism="Mus musculus"
    /mol_type="genomic DNA"
    /strain="CS7BL/6J"
    /db_xref="taxon:10090"
    /clone="UUGC1M0069B05"
    /sex="Male"

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/lab host="E. coli strain XL10-Gold, T1-resistant, F-"  
 /clone lib="Mouse 10kb plasmid UUCIM library"  
 /note="Vector: PMD24n; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource  
 (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of PMD42 (GI:4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 9; Length 19;  
 Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 TCTCCAGCGTGGC 14  
 | | | | | | | | | |  
 Db 2 TATACCGATGTGCG 15

RESULT 42  
 BM395725 20 bp mRNA linear EST 17-JAN-2002  
 LOCUS 5009-0-10-F11.t.1 Chilcoat/Turkewitz cDNA (large fraction)  
 DEFINITION Tetrahymena thermophila cDNA, mRNA sequence.

ACCESSION BM395725  
 VERSION BM395725.1 GI:18195778

KEYWORDS EST.  
 SOURCE Tetrahymena thermophila  
 ORGANISM Tetrahymena thermophila

REFERENCE Turkewitz, A.P., Karer, K.M., Jahn, C., Orias, E., Kirk, K.E.,  
 Frankel, J. and Klobutcher, L.  
 EST from Tetrahymena thermophila, strain CU428.1, growing cells  
 1 (bases 1 to 20)

Tetrahymena thermophila, strain CU428.1, growing cells  
 Unpublished (2002)  
 Contact: Turkewitz AP  
 Molecular Genetics and Cell Biology  
 University of Chicago  
 920 E. 58th Street, Chicago, IL 60637, USA  
 Tel: 773 702 4374  
 Fax: 773 702 3172  
 Email: apturkew@midway.uchicago.edu  
 Seq primer: T3.

## JOURNAL

COMMENT  
 Contact: Turkewitz AP  
 Molecular Genetics and Cell Biology  
 University of Chicago  
 920 E. 58th Street, Chicago, IL 60637, USA  
 Tel: 773 702 4374  
 Fax: 773 702 3172  
 Email: apturkew@midway.uchicago.edu  
 Seq primer: T3.

## FEATURES

source

1..20 Location/Qualifiers  
 /organism="Tetrahymena thermophila"  
 /mol\_type="mRNA"  
 /strain="CU428.1"  
 /db\_xref="taxon:5911"  
 /clone\_lib="Chilcoat/Turkewitz cDNA (large fraction)"  
 /note="Vector: Bluescript2 SK+; Details on library preparation can be found in Chilcoat and Turkewitz (2001) Proc. Natl. Acad. Sci USA, 98: 8709-8713."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 3; Length 20;  
 Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CTCCAGCGTGGC 15  
 | | | | | | | | | |  
 Db 18 CGCCCCGGTGAGC 5

RESULT 43  
 BM396970 20 bp mRNA linear EST 17-JAN-2002  
 LOCUS 5009-0-27-E12.t.1 Chilcoat/Turkewitz cDNA (large fraction)  
 DEFINITION Tetrahymena thermophila cDNA, mRNA sequence.

ACCESSION BM396970  
 VERSION BM396970.1 GI:18197023

KEYWORDS EST.  
 SOURCE Tetrahymena thermophila  
 ORGANISM Tetrahymena thermophila

REFERENCE Turkewitz, A.P., Karer, K.M., Jahn, C., Orias, E., Kirk, K.E.,  
 Frankel, J. and Klobutcher, L.  
 EST from Tetrahymena thermophila, strain CU428.1, growing cells  
 1 (bases 1 to 20)

Tetrahymena thermophila, strain CU428.1, growing cells  
 Unpublished (2002)  
 Contact: Turkewitz AP  
 Molecular Genetics and Cell Biology  
 University of Chicago  
 920 E. 58th Street, Chicago, IL 60637, USA  
 Tel: 773 702 4374  
 Fax: 773 702 3172  
 Email: apturkew@midway.uchicago.edu  
 Seq primer: T3.

FEATURES  
 source  
 1..20 Location/Qualifiers  
 /organism="Tetrahymena thermophila"  
 /mol\_type="mRNA"  
 /strain="CU428.1"  
 /db\_xref="taxon:5911"  
 /clone\_lib="Chilcoat/Turkewitz cDNA (large fraction)"  
 /note="Vector: Bluescript2 SK+; Details on library preparation can be found in Chilcoat and Turkewitz (2001) Proc. Natl. Acad. Sci USA, 98: 8709-8713."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 3; Length 20;  
 Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CTCCAGCGTGGC 15  
 | | | | | | | | | |  
 Db 19 CGCCCCGGTGAGC 6

RESULT 44  
 BM400059 20 bp mRNA linear EST 17-JAN-2002  
 LOCUS 5009-0-65-H02.t.1 Chilcoat/Turkewitz cDNA (large fraction)  
 DEFINITION Tetrahymena thermophila cDNA, mRNA sequence.

ACCESSION BM400059  
 VERSION BM400059.1 GI:18200112

KEYWORDS EST.  
 SOURCE Tetrahymena thermophila  
 ORGANISM Tetrahymena thermophila

REFERENCE Turkewitz, A.P., Karer, K.M., Jahn, C., Orias, E., Kirk, K.E.,  
 Frankel, J. and Klobutcher, L.  
 EST from Tetrahymena thermophila, strain CU428.1, growing cells  
 1 (bases 1 to 20)

Tetrahymena thermophila, strain CU428.1, growing cells  
 Unpublished (2002)  
 Contact: Turkewitz AP  
 Molecular Genetics and Cell Biology  
 University of Chicago  
 920 E. 58th Street, Chicago, IL 60637, USA  
 Tel: 773 702 4374

JOURNAL COMMENT  
 Contact: Turkewitz AP  
 Molecular Genetics and Cell Biology  
 University of Chicago  
 920 E. 58th Street, Chicago, IL 60637, USA  
 Tel: 773 702 4374



Fax: 773 702 3172  
Email: apturkew@midway.uchicago.edu  
Seq primer: T3

## FEATURES

Location/Qualifiers

1..20  
/organism="Tetrahymena thermophila"  
/mol\_type="mRNA"  
/strain="CU428.1"  
/db\_xref="taxon:5911"  
/clone\_lib="Chicoat/Turkewitz cDNA (large fraction)"  
/note="Vector: Bluescript2 SK+; Details on library preparation can be found in Chicoat and Turkewitz (2001) Proc. Natl. Acad. Sci USA, 98: 8709-8713."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 3; Length 20;  
Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTCGCGCGTGGC 15  
DB 19 CGCCCGCGTGGC 6

RESULT 45  
AG200331 21 bp DNA linear GSS 06-MAR-2004  
LOCUS Pan troglodytes DNA, clone: RP43-082D23.TJ, genomic survey  
DEFINITION sequence.  
ACCESSION AG200331  
VERSION AG200331.1 GI:45232506  
KEYWORDS GSS.  
SOURCE Pan troglodytes (chimpanzee)  
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae; Pan.

REFERENCE 1  
Park, H., Kim, Y., Kim, S., Han, Y., Woo, T., Park, K., Eun, C.J., Hoon, S.T., Chu, M., Kim, H., Joo, S., Kim, C., Song, W. and Yoo, H.  
BAC end sequences of Library RP-43  
Unpublished  
2 (bases 1 to 21)  
Park, H., Kim, Y., Kim, S., Han, Y., Woo, T., Park, K., Eun, C.J., Hoon, S.T., Chu, M., Kim, H., Joo, S., Kim, C., Song, W. and Yoo, H.  
Direct Submission  
Submitted (07-JAN-2002) Hong-Seog Park, Korea Research Institute of Bioscience and Biotechnology (KRIIB), Genome Research Center (GRC); 52, Oun-dong, Yusong-gu, Daejeon 305-333, Korea  
(E-mail: redstone@mail.kribb.re.kr, URL: http://pns.grc.kribb.re.kr/, Tel: 82-42-866-7181, Fax: 82-42-860-4409)  
Clones are derived from the chimpanzee BAC library RP-43 This BAC end was generated during the Rad process and may have higher chance of clone tracking errors.

PRIMERS  
Sequencing: TJ  
LIBRARY  
Vector : pBACe3.6  
R.site 1 : EcoRI  
R.site 2 : EcoRI.  
Location/Qualifiers  
1..21  
/organism="Pan troglodytes"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:9598"  
/clone="RP43-082D23.TJ"  
/sex="male"  
/cell\_type="lymphocytes"  
/clone\_lib="RP-43 Chimpanzee Male BAC library"

COMMENT  
Clones are derived from the chimpanzee BAC library RP-43 This BAC end was generated during the Rad process and may have higher chance of clone tracking errors.

## FEATURES

source

ORIGIN  
Query Match 51.1%; Score 9.2; DB 10; Length 21;  
Best Local Similarity 78.6%; Pred. No. 6.4e+06;

Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 CCCAGCGTGGCCA 17  
DB 3 CGAGCGGCGCCA 16

RESULT 46  
AA916047/c 22 bp mRNA linear EST 29-APR-1998  
LOCUS ub71a05.r1 Soares\_mammary\_gland NMIMMG Mus musculus cDNA clone IMAGE:1441345 3'  
DEFINITION similar to SW:RL34\_HUMAN P49207 60S RIBOSOMAL PROTEIN L34. ;, mRNA sequence.  
ACCESSION AA916047  
VERSION AA916047.1 GI:3055439  
KEYWORDS EST.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae; Homo.

REFERENCE 1 (bases 1 to 22)  
NCI-CCGAP http://www.ncbi.nlm.nih.gov/ncicgap.  
National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index  
Unpublished (1997)  
Contact: Robert Strausberg, Ph.D.  
Email: cgapbs-r@mail.nih.gov  
unknown library type  
Insert Length: 502 Std Error: 0.00  
Seq primer: -40m13 fwd. ET from Amersham  
High quality sequence stop: 1.

LOCATION/Qualifiers  
1..22  
/organism="Homo sapiens"  
/mol\_type="mRNA"  
/db\_xref="taxon:9606"  
/clone="IMAGE:1441345"  
/lab\_host="DH10B"  
/clone\_lib="NCI\_CGAP\_Br7"  
/note="Organ: breast; Vector: pCMV-SPORT4; Site 1: SalI; Site 2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.2 kb. Life Technologies catalog #10985-018"

FEATURES  
source

ORIGIN  
Query Match 51.1%; Score 9.2; DB 1; Length 22;  
Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5 CCAGCGTGGCCAT 18  
DB 20 CCAGCGTGGCCAT 7

RESULT 47  
A1120642 22 bp mRNA linear EST 02-SEP-1998  
LOCUS ub71a05.r1 Soares\_mammary\_gland NMIMMG Mus musculus cDNA clone IMAGE:1383152 5' similar to SW:RL34\_HUMAN P49207 60S RIBOSOMAL PROTEIN L34. ;, mRNA sequence.  
ACCESSION A1120642  
VERSION A1120642.1 GI:3520966  
KEYWORDS EST.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Murioidea; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 22)  
Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisler, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B.,

TITLE  
JOURNAL  
COMMENT  
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and  
Waterston,R.  
The WashU-HMI Mouse EST Project  
Unpublished (1996)  
Contact: Marra M/Mouse EST Project  
WashU-HMI Mouse EST Project  
Washington University School of Medicine  
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108  
Tel: 314 286 1800  
Fax: 314 286 1810  
Email: mouseest@watson.wustl.edu  
This clone is available royalty-free through LNL; contact the  
IMAGE Consortium (info@image.lnl.gov) for further information.  
MGI:905620

FEATURES  
source  
Trace considered overall poor quality  
Possible reversed clone: similarity on wrong strand  
Seq primer: -28ml3 rev2 RT from AmerSham  
High quality sequence stop: 1.  
Location/Qualifiers  
1. .22  
/organism="Mus musculus"  
/mol\_type="mRNA"  
/db\_xref="taxon:10090"  
/clone="IMAGE:1383152"  
/sex="female (lactating)"  
/tissue\_type="mammary gland"  
/lab\_host="DH10B"  
/clone\_lib="Soares mammary\_gland\_NMLMG"  
/note="Vector: pT73D-Pac (Pharmacia) with a modified  
polylinker; 1st strand cDNA was prepared from mammary  
gland tissue from a lactating female, and was then primed  
with a Not I - oligo(dT) primer. Double-stranded cDNA was  
ligated to Eco RI adaptors (Pharmacia), digested with Not  
I and cloned into the Not I and Eco RI sites of the  
modified pT73 vector. Library is normalized. Library  
was constructed by Bento Soares and M. Fatima Bonaldo."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 1; Length 22;  
Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 5 CCAGCGTGCCTCAT 18  
1 CCAGCGTTGACAT 14  
DB

RESULT 48  
A2776605 22 bp DNA linear GSS 16-FEB-2001  
LOCUS 2M0010119F Mouse 10kb plasmid UGCG1M library Mus musculus genomic  
DEFINITION clone UGCG2M0010119 F, genomic survey sequence.  
ACCESSION A2776605  
VERSION A2776605.1 GI:12904372  
KEYWORDS GSS.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathi; Muridea; Muridae; Murinae; Mus.  
1 (bases 1 to 22)  
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,  
Islam,H., Longacre,S., Mahmood,M., Meenen,E., Pedersen,T.,  
Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von  
Niederhausern,A. and Wright,D.,Weiss,R.  
Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
Unpublished (2000)  
JOURNAL Contact: Robert B. Weiss  
COMMENT University of Utah  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLIC, UT  
84112, USA

Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunn@genetics.utah.edu  
Insert Length: 1000 Std Error: 0.00  
Plate: 0010 row: 1 column: 19  
Seq primer: CATTGTAAACGACGCGCAT  
Class: plasmid ends  
High quality sequence stop: 22.  
Location/Qualifiers  
1. .22  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UGCG2M0010119"  
/sex="Male"  
/lab\_host="R. Coli strain XL10-Gold, Tl-resistant, F-"  
/clone\_lib="Mouse 10kb plasmid UGCG1M library"  
/note="Vector: pMD42ny; Purified genomic DNA from M.  
musculus C57BL/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource  
(http://www.jax.org/resources/documents/dnares/). The DNA  
was hydrodynamically sheared by repeated passage through a  
0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end-repaired with T4 DNA polymerase and T4  
polynucleotide kinase. Adaptor oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adapored DNA was purified and size-selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of pMD42 (gi|473214|gb|AF129072.1), a copy-number  
inducible derivative of plasmid R1. The vector was ligated  
with adaptors complementary to the insert adaptors and  
purified. The sheared, adapored mouse DNA was annealed to  
adapored vector DNA, and transformed into  
chemically-competent E. coli XL10-Gold (Stratagene) cells  
and selected for ampicillin resistance."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 9; Length 22;  
Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1 TCTCCAGCGTGGC 14  
4 TCCTCAGCGCTGG 17  
DB

RESULT 49  
A2942574 22 bp DNA linear GSS 26-APR-2001  
LOCUS 2M0202H16R Mouse 10kb plasmid UGCG2M library Mus musculus genomic  
DEFINITION clone UGCG2M0202H16 R, genomic survey sequence.  
ACCESSION A2942574  
VERSION A2942574.1 GI:13805935  
KEYWORDS GSS.  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
Sciurognathi; Muridea; Muridae; Murinae; Mus.  
1 (bases 1 to 22)  
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,  
Islam,H., Longacre,S., Mahmood,M., Meenen,E., Pedersen,T.,  
Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von  
Niederhausern,A. and Wright,D.,Weiss,R.  
Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
Unpublished (2000)  
JOURNAL Contact: Robert B. Weiss  
COMMENT University of Utah  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLIC, UT

84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: ddunn@genetics.utah.edu  
 Insert Length: 1000 Std Error: 0.00  
 Plate: 0202 row: H column: 16  
 Seq primer: CACACAGCAACACGTATGACC  
 Class: plasmid ends  
 High quality sequence stop: 22.  
 Location/Qualifiers  
 1..22

/organism="Mus musculus"  
 /mol\_type="genomic DNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="U9C2M0202H16"  
 /sex="Female"  
 /lab\_host="E. coli strain XL10-Gold, T1-resistant, F-"  
 /clone\_id="Mouse 10kb plasmid U9C2M library"  
 /note="Vector: PMD42nv; Purified genomic DNA from M. musculus C57BL/6J (female) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 9; Length 22;  
 Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 CCCAGGCTGGCCA 17  
 |||||  
 Db 22 CCCAGGCTGGCCA 9

RESULT 50  
 BM396297/c 23 bp mRNA linear EST 17-JAN-2002  
 LOCUS  
 DEFINITION  
 5009-0-2-B07.c.2 Chilcoat/Turkewitz cDNA (large fraction)  
 Tetrachymena thermophila cDNA, mRNA sequence.  
 ACCESSION  
 BM396297  
 VERSION  
 BM396297.1 GI:18196350  
 KEYWORDS  
 EST.  
 SOURCE  
 Tetrachymena thermophila  
 Tetrachymena thermophila  
 Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;  
 Hymenostomatida; Tetrachymenida; Tetrachymenidae; Tetrachymena.  
 1 (bases 1 to 23)  
 Turkewitz,A.P., Karer,K.M., Jahn,C., Orias,E., Kirk,K.E.,  
 Frankel,J. and Klobutcher,L.  
 EST from Tetrachymena thermophila, strain CU428.1, growing cells  
 Unpublished (2002)  
 COMMENT  
 Contact: Turkewitz AP  
 Molecular Genetics and Cell Biology  
 University of Chicago  
 920 E. 58th Street, Chicago, IL 60637, USA  
 Tel: 773 702 4374  
 Fax: 773 702 3172  
 Email: apturkew@midway.uchicago.edu

FEATURES  
 Seq primer: T3.  
 Location/Qualifiers  
 1..23

/organism="Tetrachymena thermophila"  
 /mol\_type="mRNA"  
 /strain="CU428.1"  
 /db\_xref="taxon:5911"  
 /clone\_id="Chilcoat/Turkewitz cDNA (large fraction)"  
 /note="Vector: Bluescript SK+; Details on library preparation can be found in Chilcoat and Turkewitz (2001) Proc. Natl. Acad. Sci USA, 98: 8709-8713."

## ORIGIN

Query Match 51.1%; Score 9.2; DB 3; Length 23;  
 Best Local Similarity 78.6%; Pred. No. 6.4e+06;  
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTCGCCGCTGCGC 15  
 |||||  
 Db 22 CGCCCGCGTGAGC 9

Search completed: February 17, 2006, 20:36:04  
 Job time: 2008 secs

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